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FEDERAL VOTING ASSISTANCE PROGRAM

# 2016 OVERSEAS CITIZEN POPULATION ANALYSIS REPORT

September 2018

2016 Overseas Citizen Population Analysis

# STUDY FINDINGS

*Volume 1*

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## INTRODUCTION

The Overseas Citizen Population Analysis (OCPA) is an effort sponsored by the Federal Voting Assistance Program (FVAP) to learn more about the U.S. overseas citizen population and the ways in which they navigate the voting process.[1] FVAP is statutorily mandated to report on the registration and voting activities of the populations they serve—including U.S. citizens living overseas—after each general election. A four-step process is used to better understand this population:

1) Estimate the voting rate of the Overseas Citizen Voting Age Population (OCVAP) in the 2016 General Election;
2) Compare the level of participation to that of the voting-age population living in the United States;
3) Determine to what degree that estimated difference in participation between the two populations is due to voting obstacles unique to the OCVAP; and
4) Assess the extent to which policies designed to mitigate these obstacles are successful.

*Overseas Citizen:* Citizens of the United States who are living or located in another country.

*Overseas Citizen Voting Age Population (OCVAP).* The subset of overseas citizens who are at least 18 years of age. This constitutes the voting-eligible population for the purposes of this study.

*Citizen Voting Age Population (CVAP).* The corresponding population of voting age individuals living within the United States. This group serves as a comparison point for the OCVAP.

Estimating the participation rate of the OCVAP is difficult because the nature of living abroad makes it hard to know how many overseas citizens there are, where they are located, and the number that are eligible to vote. Estimates produced by host-country statistical agencies for the total number of U.S.-born or U.S.-citizen populations are available for some countries in some years, but comprehensive estimates for any given election year are generally unavailable and information on the more relevant subpopulation of U.S. citizens who are voting-age is even harder to obtain. The OCPA addresses this problem by using a statistical model-averaging methodology to estimate both the number of OCVAP as well as their distribution across countries.

Using this method results in approximately 3 million voting-age citizens living abroad—with an estimated 208,000 votes attributed to individuals with non-U.S. addresses identified in state and local government absentee ballot records. This yields an estimated OCVAP voting rate of 6.9%, as compared to a 2016 General Election voting rate of approximately 72% for the domestic CVAP—implying a significant difference in participation between the overseas and domestic CVAPs.

To what degree is this voting gap due to systemic obstacles to voting unique to the OCVAP as opposed to individual factors such as differences in motivation? The answer lies, in part, in country-specific population estimates and vote totals derived from state and local absentee ballot request and voter files. In particular, by comparing the OCVAP voting rates between countries with different levels of international mailing-related obstacles to voting, the relationship between these obstacles

1 The OCPA was first conducted for the 2014 General Election and was released in February 2016. The report can be found here: https://www.fvap.gov/uploads/FVAP/Reports/FVAP-OCPA_201609_final.pdf

and voting rates were estimated at the country level. These estimated relationships were used to generate a prediction for what the voting rate would have been absent the OCVAP-specific obstacles for each country. These estimates are combined to create a predicted, obstacle-free OCVAP participation rate of approximately 37.5%. The difference between this predicted participation rate and the estimated actual OCVAP participation rate (30.5%) implies that more than half of the 63-percentage-point voting gap between overseas and domestic CVAP is due to obstacles to voting specific to OCVAP.

The OCPA also relies heavily upon data from the Overseas Citizen Population Survey (OCPS) in an effort to gain insight into how overseas citizens mitigate these obstacles—and, thus, how policy changes might help this group. The OCPS is conducted as a part of FVAP's analysis of the overseas citizen population and is distributed to overseas citizens who requested an absentee ballot for the 2016 General Election. The OCPS asks respondents to share the means by which they requested and returned their absentee ballots. Data from the OCPS are analyzed in conjunction with overseas population estimations to reveal geographic patterns in obstacles to voting, and help better understand how various policies can affect voting from around the world. Cross-tabulations of the survey results can be found in Volume 3.

Analysis of the OCPS data reveals two key points: first, a disproportionate number of OCVAP absentee ballot requesters are from states that allow electronic return of absentee ballots; and second, requesters located in countries where mail or geography make receiving a physical ballot a challenge are more likely to receive and return their absentee ballot electronically. These findings suggest that policies permitting electronic ballot receipt and return are able to overcome issues of international mailing reliability. And yet, this does not reflect the majority of overseas voters' experiences; many absentee ballot requesters did not receive their ballot electronically—and only a minority of voters with the option to return their ballot electronically actually did so. This suggests that knowledge about electronic modes of absentee voting may be imperfect, and points to a potentially significant role that FVAP can play in reducing the voting gap.

## OVERSEAS CITIZEN POPULATION ESTIMATES

The estimates for the size of the OCVAP are derived from modeling the following:[2]

(1) Foreign Government Estimates (FGE), or total counts of U.S. citizens living in non-U.S. countries produced by the country's government; and

(2) Data on subpopulations (further broken down by age/gender/education level) of U.S. residents. FGEs are usually available in 5- or 10-year increments for the period 2000–2016.

These FGEs are modeled as functions of different features of the country or FGEs, including:

- which population was counted (e.g., U.S.-born vs. U.S. citizens);
- how the population was counted (e.g., a census or a migrant registry);
- counts of particular subpopulations of U.S. citizens residing in the country (e.g., those who have declared foreign income to the Internal Revenue Service [IRS], receive social security benefits); and
- multiple sets of predictors of the size of the migrant population derived from the academic literature on migration (e.g., distance between the country and the United States and the country; trade between the United States and the country).

These models are used to generate predictions of the number of U.S. citizens (including dual citizens) the foreign government would have counted in 2016 had it used a census.

For each region, predictions across models are averaged for each country to arrive at the final estimate of the size of the population of U.S. citizens residing in the country. A similar methodology is used to generate estimates of the fraction of the total population that is of voting age. Summing the resulting estimates of the citizen voting age population for each country produces an estimate of the total 2016 Overseas Citizen Voting Age Population (OCVAP).[3]

### The Total Overseas Citizen Population

There were an estimated 5.5 million U.S. citizens living overseas in 2016. This represents an increase of slightly more than 1 million (23%) since 2010.[4] These citizens are distributed across 170 countries, with the largest populations in Europe and the Western Hemisphere, including Canada. The greatest population growth since 2010 has been in East Asia and the Pacific, which had an estimated population increase of 36% from 2010 to 2016. The population in South-Central Asia also increased substantially, with the 2016 population estimated to be about 28% larger than in 2010.

2 Modeled estimates are used instead of government census and registry estimates because (1) the latter are not available for every country in 2016; (2) the latter may count U.S.-born rather than U.S. citizens; and (3) among those that do count U.S. citizens, it is unclear whether they count dual citizens. See Chapter 1 of OCPA Volume 2 for more information about modeling methodology.

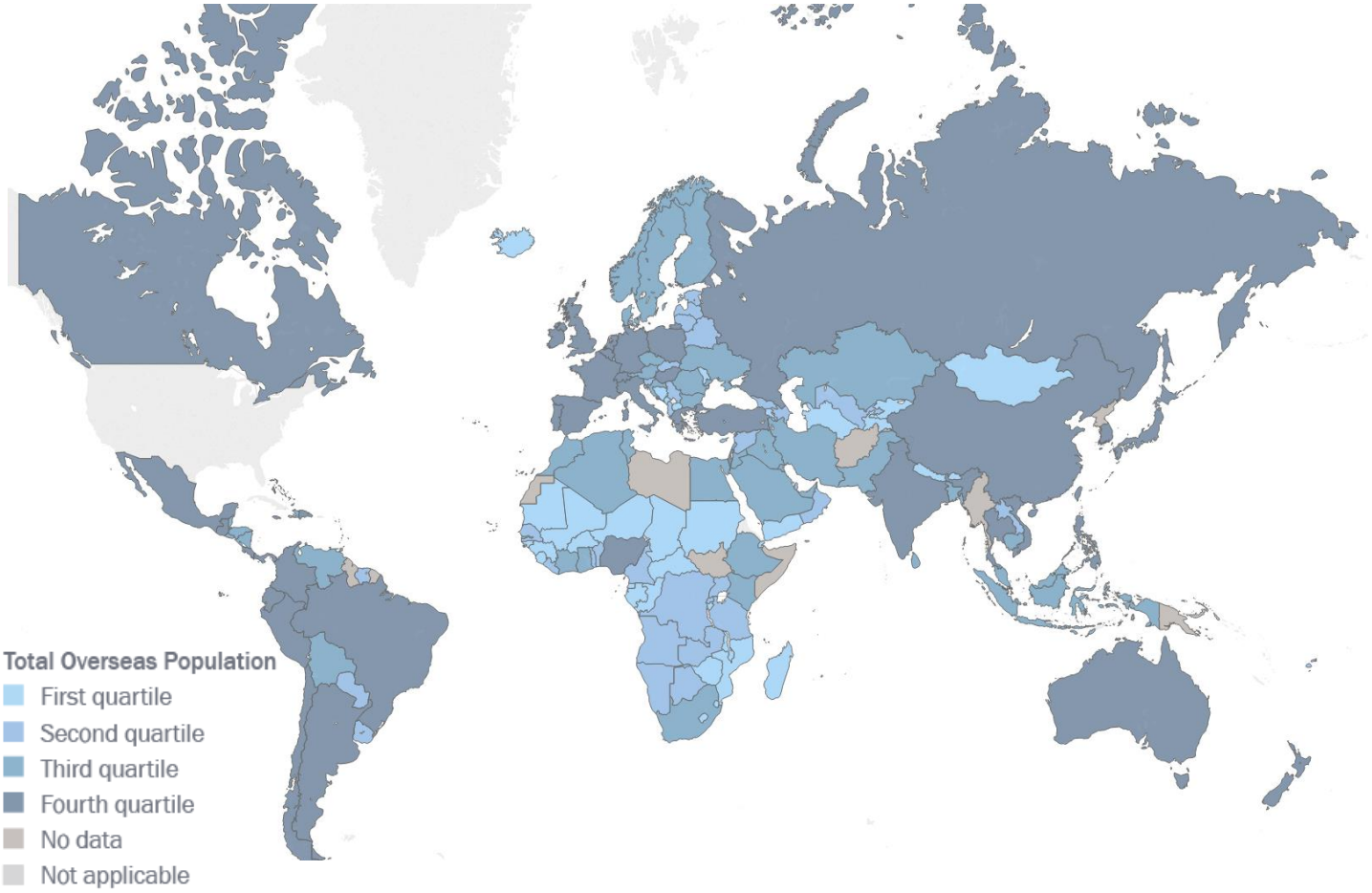
3 More detailed information about the methodology used to produce this estimate, as well as validation of the estimate, is presented in Chapter 1 of Volume 2. See Chapter 2 of OCPA Volume 2 for comparisons to World Bank and State Department population estimates.

4 Region totals from 2010 to 2014 differ from those reported in the in the 2014 OCPA report because (1) estimates have been generated for fewer countries (170 in 2016 vs. 186 in 2014), and (2) lower average estimates, a result of differences in data used to fit the model. See Chapter 2 in OCPA Volume 2 for more information about differences between the 2014 and 2016 estimates.

| Table 1. Total Overseas Citizen Population, by Region | | | | |
|---|---|---|---|---|
| Region | 2010 | 2012 | 2014 | 2016 |
| Africa | 102,476 | 111,889 | 105,916 | 105,897 |
| East Asia and Pacific | 690,686 | 796,115 | 869,272 | 938,713 |
| Europe | 1,233,724 | 1,327,215 | 1,407,725 | 1,454,291 |
| Near East | 214,392 | 228,569 | 238,537 | 234,039 |
| South-Central Asia | 99,120 | 110,325 | 121,525 | 126,939 |
| Western Hemisphere | 2,120,543 | 2,337,283 | 2,537,455 | 2,629,142 |
| **Total** | **4,460,941** | **4,911,396** | **5,280,430** | **5,489,021** |

Figure 1 shows the estimated overseas population by country. Mexico, Canada, the United Kingdom, France, and China have the largest total populations of overseas citizens. By far the largest populations were in countries that share a border with the United States—Mexico had an estimated population of more than 1 million U.S. citizens in 2016, followed closely by Canada, with an overseas citizen population of about 825,000. The next largest population was found in the United Kingdom, which was estimated to have just under 425,000 U.S. citizens in 2016. China and France had estimated populations of about 200,000 and 250,000 U.S. citizens, respectively.

**Figure 1. Total Overseas Citizen Population Estimates by Country, 2016**



## The Overseas Citizen Voting Age Population (OCVAP)

Not all of the individuals in the overseas citizen population are 18 years old and, thus, old enough to vote. Of the estimated 5.5 million overseas citizens in 2016, about 3 million were of voting age. Table 2 shows the estimated OCVAP from 2010 to 2016.

**Table 2. Total Overseas Citizen Voting Age Population (OCVAP) by Region**

| Region | 2010 | 2012 | 2014 | 2016 |
|---|---|---|---|---|
| Africa | 39,857 | 44,957 | 45,944 | 42,141 |
| East Asia and Pacific | 423,586 | 496,014 | 546,150 | 587,658 |
| Europe | 911,576 | 970,268 | 1,016,126 | 1,028,892 |
| Near East | 162,874 | 176,367 | 185,587 | 180,083 |
| South-Central Asia | 33,036 | 36,158 | 40,263 | 42,393 |
| Western Hemisphere | 973,791 | 1,069,466 | 1,140,934 | 1,117,843 |
| **Total** | **2,544,720** | **2,793,230** | **2,975,004** | **2,999,009** |

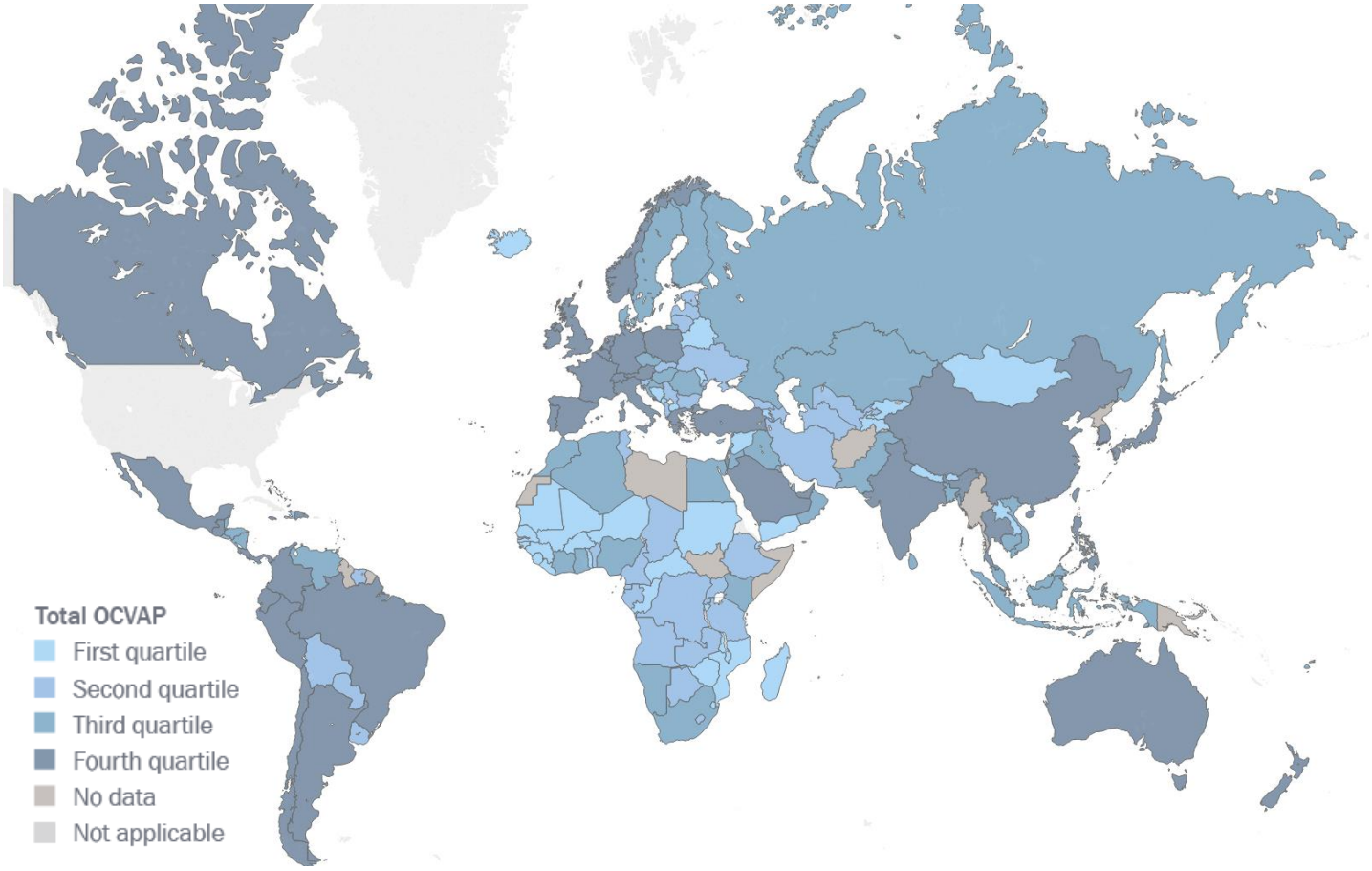
### *Demographic Characteristics of the OCVAP in 2016*

- **Education.** The overseas citizen voting age population is estimated to be highly educated compared to its domestic counterpart—54% of OCVAP have obtained a bachelor's degree, compared to 30% of the CVAP.
- **Age.** The OCVAP skews younger than the CVAP. Ten percent are of retirement age (65+), compared to 20% domestically. However, the proportion who are working age (25–65) is the same in both populations, at 68%.
- **Gender.** The overseas citizen voting age population is slightly more male (53%) than its domestic counterpart (49%).

The OCVAP differs from the total U.S. population with respect to growth in recent years. Although the total overseas citizen population grew by just over 1 million between 2010 and 2016, the number of overseas citizens 18 years of age or older composed less than half of this increase. By contrast, growth in the 18+ population was responsible for all the growth in the CVAP population in that period. However, the age distribution of the overseas citizen population is not uniform across countries. Only about one-third of the estimated 127,000 U.S. citizens living in South-Central Asia are of voting age, as compared to nearly 80% of U.S. citizens in the Near East region. The two regions with the largest total overseas citizen populations—the Western Hemisphere and Europe—each has an estimated OCVAP of just over 1 million. This translates to about 70% of the overseas citizen population in Europe being of voting age, but only about 43% of the U.S. citizens living in the Western Hemisphere being of voting age.

Figure 2 shows the distribution of the estimated OCVAP in each country. The countries with the largest estimated overseas citizen populations, overall, are also among those with the largest estimated OCVAP. Despite having a relatively young overseas citizen population, Mexico is still among the countries with the largest OCVAP, with about 200,000 U.S. citizens 18 years or older.

**Figure 2. Total Overseas Citizen Voting Age Population (OCVAP) Estimates by Country, 2016**




Knowing both the total population as well as its geographic distribution is important to policy assessments of federal laws like the *Uniformed and Overseas Citizens Absentee Voting Act* (*UOCAVA*) and the *Military and Overseas Voter Empowerment (MOVE) Act* designed to assist these voters. Not only do overseas citizens still face challenges when trying to cast their ballots, but these challenges are likely to vary with respect to geographic location, with individuals located in certain areas experiencing greater challenges than others. As seen in the next section, the overseas ballot request and voting rates can help us better understand where in the voting process these challenges might occur, and comparison to the CVAP voting rate can serve as a first step in quantifying the differences between OCVAP and CVAP voting.

## 2016 OVERSEAS CITIZEN BALLOT REQUEST AND VOTING RATES

In 2016, a total of 296,792 overseas citizens voted, as indicated by unique absentee ballot requests with an overseas address identified within administrative records (see Volume 2 for technical details). This represents an overall absentee ballot request rate of 9.9% among OCVAP from the 170 countries for which population estimates were available. In total, an estimated 208,329 votes were cast by overseas citizens in the 2016 General Election, equivalent to an OCVAP voting rate of 6.9% worldwide. The overseas ballot request rate was highest in Africa, where an estimated 15% of OCVAP requested an absentee ballot; however, only about two-thirds of absentee ballot requesters in Africa had a vote recorded in administrative vote history files. The highest regional voting rate was in Europe, where about 10% of the estimated 1 million voting age U.S. citizens living in these countries voted, according to administrative records. In 2016, the lowest ballot request and voting rates were among overseas U.S. citizens in the Western Hemisphere. In these countries, about 6.3% of OCVAP requested an absentee ballot and just 4.3% voted in the 2016 General Election.

**Table 3. Overseas Absentee Ballot Requests and Votes Recorded, Overall and by Region**

| Region | Ballot Requesters | Ballot Request Rate | Votes Recorded | Voting Rate | CVAP Voting Rate Gap |
|---|---|---|---|---|---|
| Africa | 6,330 | 15.0% | 4,090 | 9.7% | 62.2% |
| East Asia and Pacific | 55,133 | 9.4% | 37,168 | 6.3% | 65.6% |
| Europe | 138,354 | 13.4% | 102,904 | 10.0% | 61.9% |
| Near East | 21,287 | 11.8% | 12,348 | 6.9% | 65.0% |
| South-Central Asia | 5,341 | 12.6% | 3,196 | 7.5% | 64.4% |
| Western Hemisphere | 70,347 | 6.3% | 48,622 | 4.3% | 67.6% |
| **Total** | **296,792** | **9.9%** | **208,329** | **6.9%** | **65.0%** |

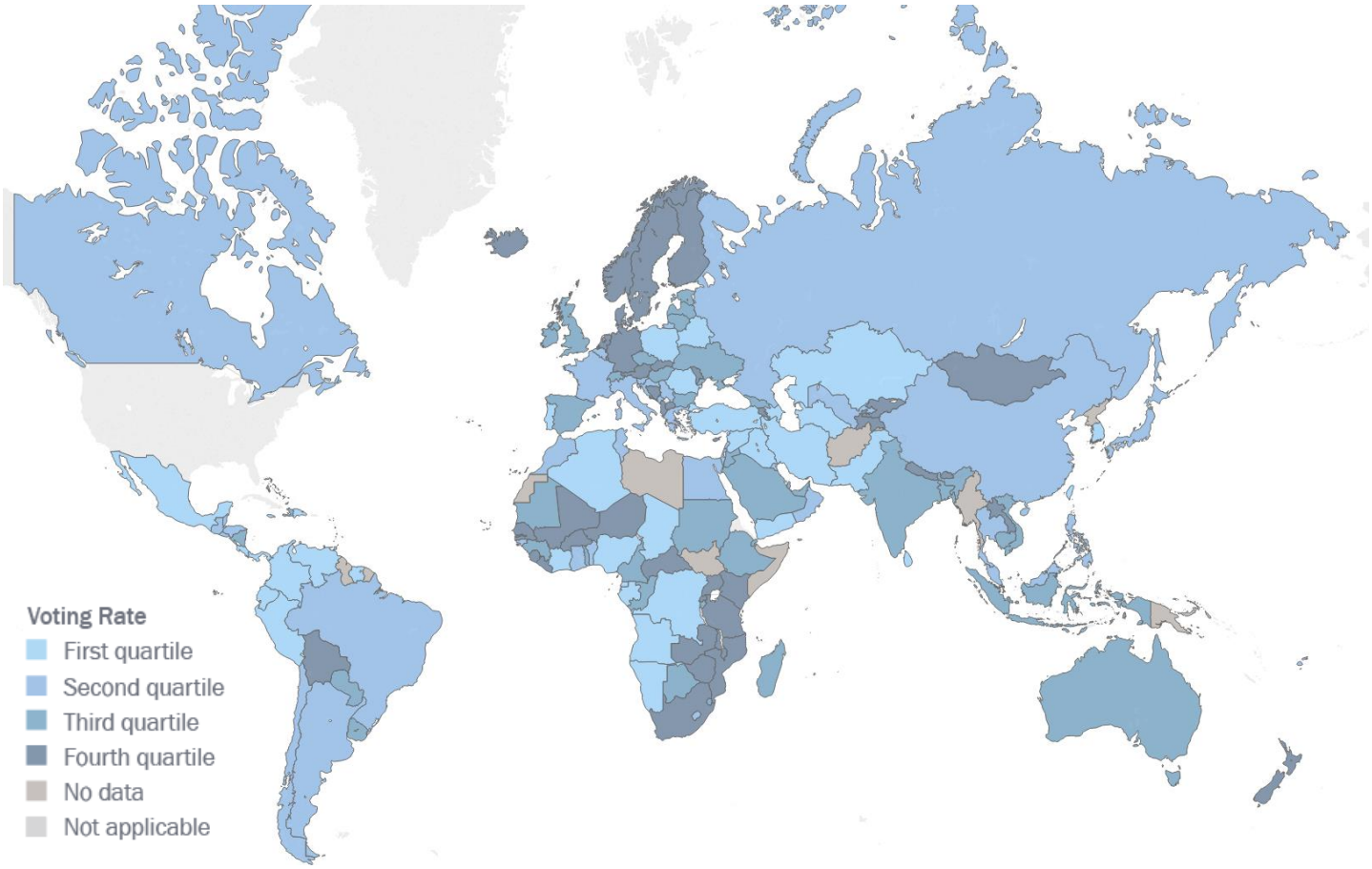
By comparison, the voting rate among the domestic CVAP population was approximately 71.9% in the 2016 General Election. Note that the CVAP voting rate is calculated in a different manner here than in other reports, for comparability with the overseas citizen population in this study.[5] The 65-percentage-point voting rate gap between overseas and domestic CVAP suggests that a citizen living within the United States is more than 10 times more likely to vote than a U.S. citizen abroad.[6] The sizable voting rate gap suggests that living overseas has an effect on the likelihood of

5 To obtain an estimate of the participation rate for the domestic CVAP, this report uses data from the November supplement of the Census Bureau's Current Population Survey (CPS), a monthly in-person survey of approximately 56,000 households. Although primarily intended to be a survey about employment status, a subset of individuals who are of voting age and U.S. citizens were asked additional questions about voting behavior in the days following the 2016 General Election (November 13–19). Specifically, respondents were asked, "in any election, some people are not able to vote because they are sick or busy or have some other reason, and others do not want to vote. Did (you/name) vote in the election held on Tuesday, November 8, 2016?" Including only respondents who answered "yes" or "no" to this question produces an implied domestic CVAP participation rate of approximately 71.9%. This differs slightly from the Census Bureau's estimated participation rate of 61.4%, which counts those answering "don't know," refusals, and non-responses as non-voters. For comparability with the overseas citizen population, and because it is unknown whether individuals who refused this question voted or not, these responses are excluded in the domestic CVAP voting rate used in this report. Description of the cps data collection methodology and instrument can be found at: https://www2.census.gov/programs-surveys/cps/techdocs/cpsnov16.pdf.

6 It should be noted that although the domestic CVAP voting rate is a survey-based estimate using self-reported voting, the OCVAP voting rate is an administrative measure of voting. Survey-based measures of voting turnout are typically higher than those based on administrative records (see: http://www.pewresearch.org/2018/02/15/political-data-in-voter-files/). As a result, comparison of these estimates tend to produce a larger voting rate gap than might be found using alternative measures. In addition, CPS does not include

voting, either because there are obstacles that make it more difficult or because one is less motivated to do so.[7]

**Figure 3. Voting Rate Estimates by Country, 2016**




institutionalized individuals as part of the survey, but similarly ineligible voting age overseas citizens are included in OCVAP voting rate estimates. Some absentee ballot request records that did not include an address may have originated from overseas, but these were not included as part of the overseas vote count. In Appendix F, the sensitivity of the voting gap to the use of different measures of the overseas participation rate and an administrative domestic CVAP participation rate is examined. Generally, the voting gap remains large regardless of which sets of overseas and domestic participation rates are used. Results for the decomposition analysis using this administrative voting proxy can be found in Appendix D.

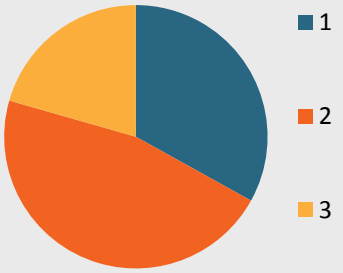
7 A part of the residual gap may be due to differences in motivation that are in turn due to differences in the demographic composition between the overseas and domestic CVAP. To understand what part of the residual gap would exist absent this difference in composition, voting rates for individual age-gender-education strata of the domestic CVAP were derived from the CPS, and weighted average of these strata calculated, in which the weights were determined by the fractions of the OCVAP in each strata. The result is an estimate of the voting rate of the domestic CVAP population that is identical to the OCVAP with respect to observable demographic characteristics. This adjusted domestic CVAP participation rate is 77%, implying a voting gap of 70 percentage points and a residual gap of 40 percentage points.

Table 4. Registration and Voting in Countries with the 10 Largest Estimated Overseas Citizen and Voting Age Citizen Populations

| | Overseas Citizen Population | | Overseas Citizen Voting Age Population (OCVAP) | | Ballot Request Rate | Voting Rate |
|---|---|---|---|---|---|---|
| | Total | Rank | Total | Rank | | |
| Mexico | 1,091,206 | 1 | 201,415 | 3 | 3.9% | 2.4% |
| Canada | 825,630 | 2 | 622,492 | 1 | 6.8% | 5.3% |
| United Kingdom | 424,928 | 3 | 329,274 | 2 | 12.3% | 9.5% |
| France | 241,487 | 4 | 169,037 | 4 | 9.5% | 7.3% |
| China | 202,915 | 5 | 58,490 | 11 | 8.2% | 4.7% |
| Japan | 137,231 | 6 | 125,779 | 5 | 6.3% | 4.8% |
| Australia | 135,580 | 7 | 115,805 | 6 | 12.6% | 8.9% |
| Israel | 128,392 | 8 | 113,651 | 7 | 12.2% | 6.9% |
| Germany | 111,430 | 9 | 94,777 | 8 | 21.7% | 16.8% |
| Colombia | 102,945 | 10 | 39,019 | 17 | 4.3% | 2.3% |
| Italy | 90,494 | 11 | 70,465 | 9 | 10.9% | 7.1% |
| South Korea | 79,934 | 16 | 62,698 | 10 | 4.4% | 2.9% |

## EXAMINING THE CVAP–OCVAP VOTING GAP

*Findings from the 2016 Overseas Citizen Population Survey: More absentee ballot requesters rate their local postal service as less reliable than more reliable relative to the USPS.*




**"How would you characterize the reliability of postal service in [your country] relative to the United States Postal Service?"**

1. Less Reliable (33%)
2. About the same level of reliability (46%)
3. More Reliable (21%)

*Opportunity*, *motivation*, and *ability* are key factors determining whether one votes, and can help us conceptualize the potential drivers of the CVAP–OCVAP voting gap. In 1986, *UOCAVA* created the legal basis for the voting rights of U.S. citizens living overseas, guaranteeing that these citizens have the *opportunity* to vote in all federal elections. However, the uniqueness of overseas citizens' social environments and the absentee voting process often limit the *ability* of overseas citizens to exercise this right, even if they are motivated to do so. FVAP provides information, tools, and resources to help overcome these challenges and ensure that overseas citizens are able to exercise their right to vote—wherever they are.

The social context in which one lives strongly affects one's likelihood of voting (McClurg, 2003). Social connections can create a sense of shared community interest and civic responsibility, and serve as a source of procedural information about when, where, and how to vote (Putnam, 2000; Stoker and Jennings, 1995; Gerber, Green, and Larimer, 2008; Verba, Schlozman, & Brady, 1995).

In the box to the left, results from the 2016 OCPS (although the survey reflects only a subset of overseas citizens) demonstrate a common challenge that overseas citizens encounter when voting from overseas: mailing systems outside of the United States are often perceived as unreliable. About one-third of respondents to the 2016 OCPS reported that the postal system in their country was less reliable than that of the United States.

Although differences in *motivation* may explain some of the gap in the voting rate between CVAP and OCVAP, regional patterns in the voting gap suggest that overseas citizens face obstacles that hinder their ability to vote, and that these obstacles are greater for those in countries and regions than in others. To what extent is the voting rate gap between CVAP and OCVAP attributable to obstacles versus differences in motivation?

### Defining the CVAP-OCVAP Voting Gap

In order to better understand the factors contributing to the difference in CVAP and OCVAP voting rates, the CVAP–OCVAP voting gap can be broken down into two component parts: (1) the obstacles gap and (2) the residual overseas gap. The obstacles gap is the portion of the voting gap that can be attributed to country-level infrastructure obstacles that hinder citizens' ability to vote from overseas. The residual overseas gap accounts for other factors—such as motivational

differences, election salience, or connection to U.S. politics—that contributes to the difference in voting rates. There are several federal statutes that were created to help overseas citizens overcome the obstacles associated with overseas voting. These statutes make special provisions for U.S. citizens voting from overseas, and FVAP works to educate overseas citizens on these special provisions and the resources available to them to help them vote in the face of increased obstacles. Examining the obstacles gap and how it varies across countries will help FVAP understand where obstacles to voting are greatest, and more importantly, where obstacles are having the largest impact on voters' ability to vote.

> *Voting Gap = Obstacles Gap + Residual Overseas Gap*
>
> *Obstacles Gap: The part of the difference between the OCVAP and CVAP voting rates that is attributable to differences in ability to vote due to infrastructural obstacles encountered when voting from overseas versus voting domestically.*
>
> *Residual Overseas Gap: The remaining difference between the OCVAP and CVAP voting rates that is due to other motivational and internal differences between overseas and domestic voting age populations.*

One major problem for overseas citizens attempting to vote in U.S. elections is the time it takes for election materials to travel between an overseas voter and his or her local election office. An overseas citizen must first send registration and ballot request forms to the local election office. The office then sends the voter a blank ballot, which must be completed and returned to the local election office by the statutory deadline for absentee ballot receipt in order to be counted. If each step is conducted by mail, then this can become a lengthy process because of the ballot transit time involved. Over the last two decades, a number of federal laws and regulations have attempted to address the election materials transit time problem and make it easier for overseas citizens to cast ballots in U.S. elections.

Among the key provisions of *UOCAVA* are the creation of the Federal Post Card Application (FPCA) and the Federal Write-In Absentee Ballot (FWAB). The FPCA is accepted in all states and allows a citizen covered under *UOCAVA* to register to vote and request an absentee ballot using a single form. By standardizing this process, *UOCAVA* sought to reduce the barrier to voting caused by complex and inconsistent procedures across states and local jurisdictions. The FWAB is a backup ballot that citizens covered by *UOCAVA* may use to vote in any federal election if they do not receive their regular absentee ballot in time to return before statutory deadlines.

In 2009, Congress again acted to address the ballot transit time problem by passing the *MOVE Act*. This law requires states to send absentee ballots to *UOCAVA* voters no later than 45 days before a federal election if the voter has submitted a valid ballot request by that date. Further, the *MOVE Act* requires states to offer an electronic method of receiving blank ballots. This is an important protection, especially for those in countries with unreliable mail systems. Research had shown that, before the *MOVE Act*, *UOCAVA* voters in 25 states and the District of Columbia did not have enough time to cast their ballots because these jurisdictions sent ballots out to voters too close to Election Day. The 45-day voting period was intended to address this problem by providing a lengthy period for voting, ensuring there would be enough time for ballot transit between the voter and local election office.

## The Obstacles Gap

To assess the extent to which overseas citizens vote at lower rates due to the obstacles associated with being overseas, the baseline voting gap is broken down into the part that is due to the

obstacles, particularly those that affect one's ability to transmit and receive election-related materials in a timely manner, versus the part attributable to motivation or other internal factors. To frame it another way, the obstacles gap is the difference between the actual participation rate of the OCVAP and the participation rate expected if obstacles were similar to those faced by domestic voters.

The obstacles to voting encountered by OCVAP are not consistent across the entire population. Using cross-country variation in OCVAP voting rates and observable indicators of obstacles to voting that are specific to the OCVAP, the impact of obstacles is assessed by (1) estimating the effect of these obstacles on voting rates, and then (2) predicting what the participation rate would be in a hypothetical country if these obstacles were removed. The full methodology and model can be found in Appendix C.

## Impact of Voting Obstacles in 2016

The estimated OCVAP voting rate in 2016 was 6.9%. As seen in Figure 4, if obstacles to voting from overseas were removed, the expected OCVAP voting rate would have been 37.5%, an increase of 30.5% percentage points. Absent obstacles, a substantial voting gap would still exist in the overall voting rate gap between domestic and overseas CVAP, but the size of the gap would be reduced from 65 percentage points to 34.4 percentage points. In other words, elimination of obstacles to voting reduces the voting gap by nearly half.

**Figure 4. Decomposition of the Voting Gap**

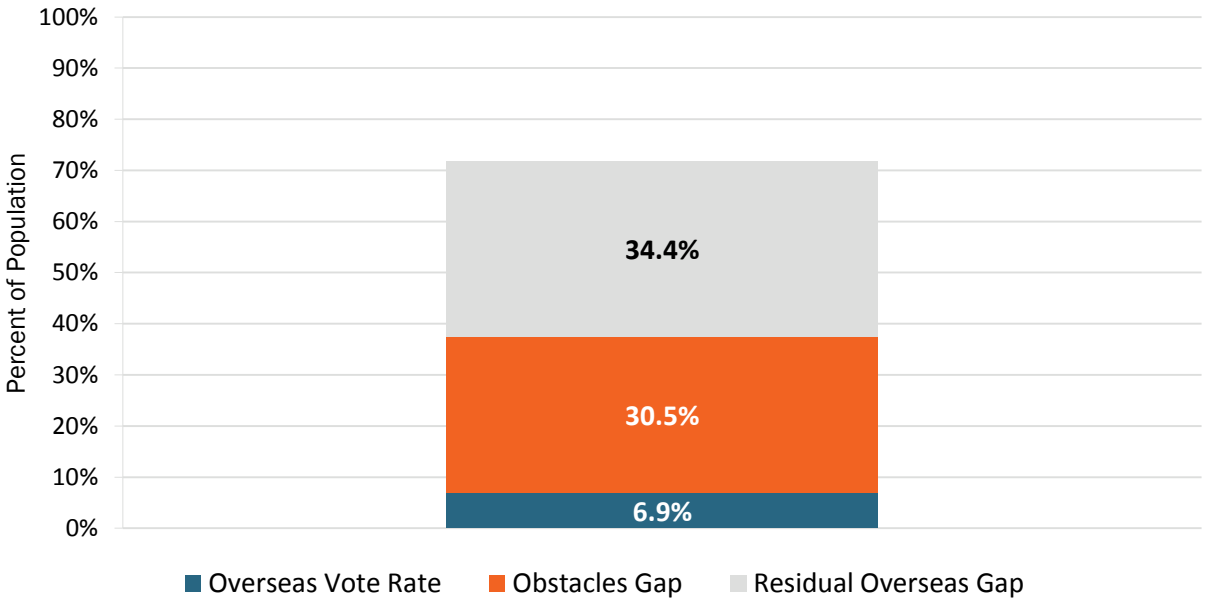
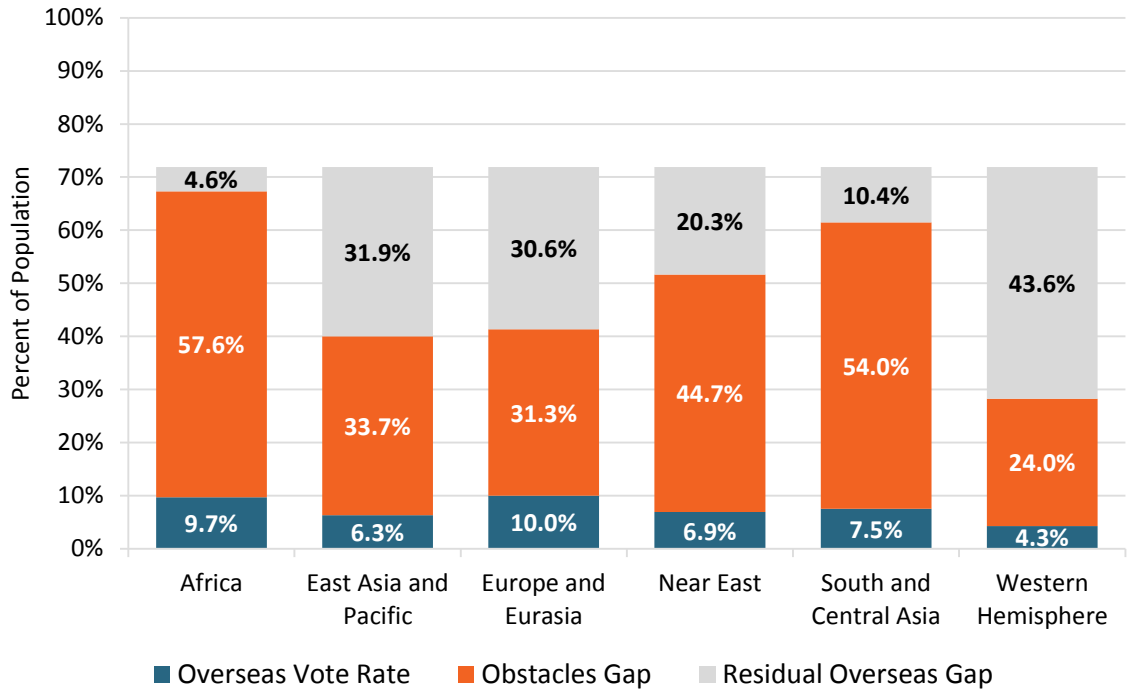


Figure 5 implies that obstacles to voting explain a relatively large fraction of the voting gap between OCVAP residing in Africa and South-Central Asia and the domestic CVAP population, whereas differences in the residual gap play more of a role in explaining the voting gap in East Asia/Pacific and the Western Hemisphere.

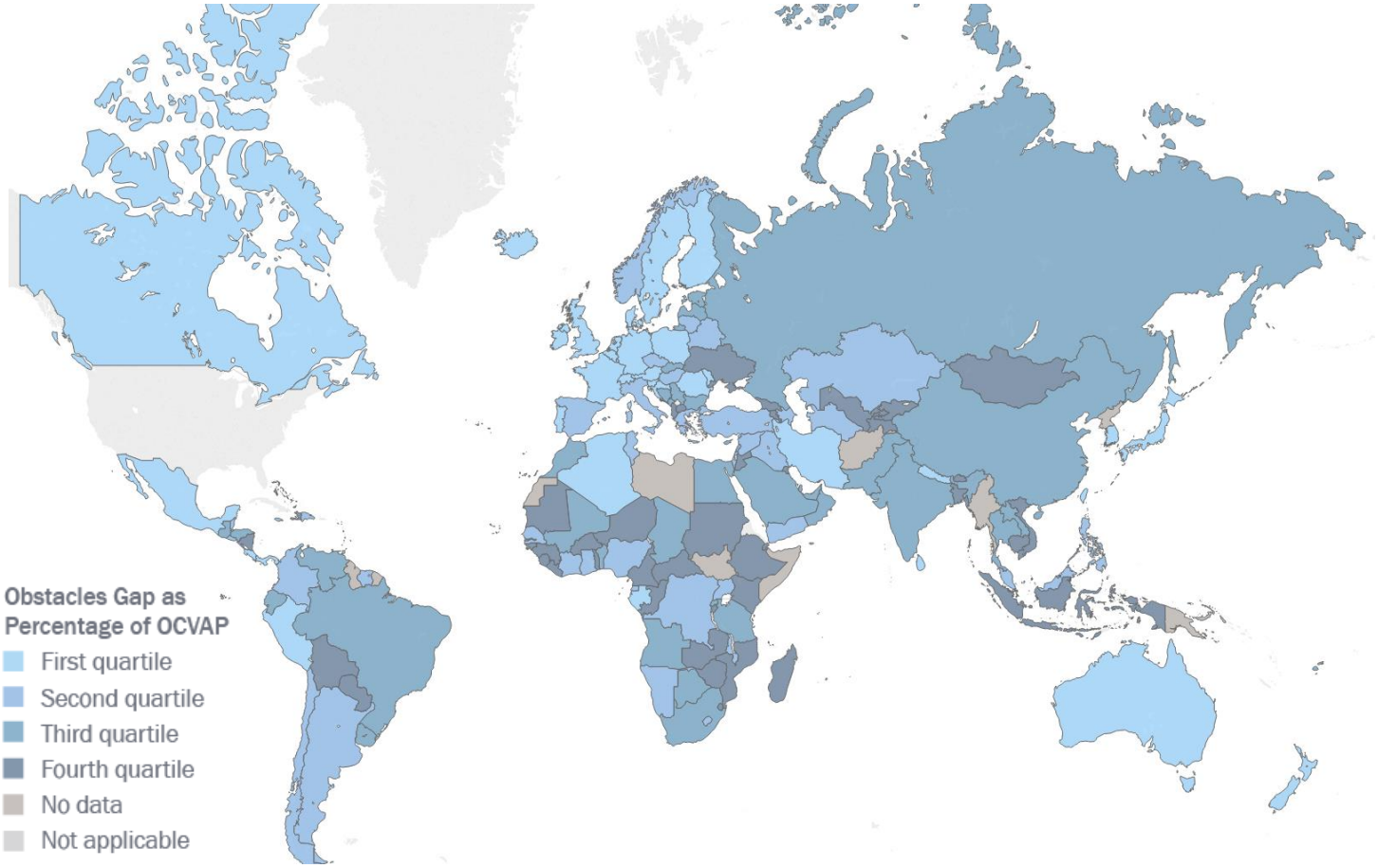
**Figure 5. Decomposition of the Voting Gap by Region**[8]




8 Note that there is variance within world regions regarding the obstacles associated with each country. World regions are organized according to the U.S. Department of State's official list—not by voting variables. Particularly, although the obstacles gaps appear to be high overall in the Africa and South and Central Asia regions, some countries—such as Algeria, Australia, and New Zealand—have much lower obstacles gaps than most other countries in their region. Additionally, some African and South and Central Asian countries have very small sample sizes of overseas citizens.

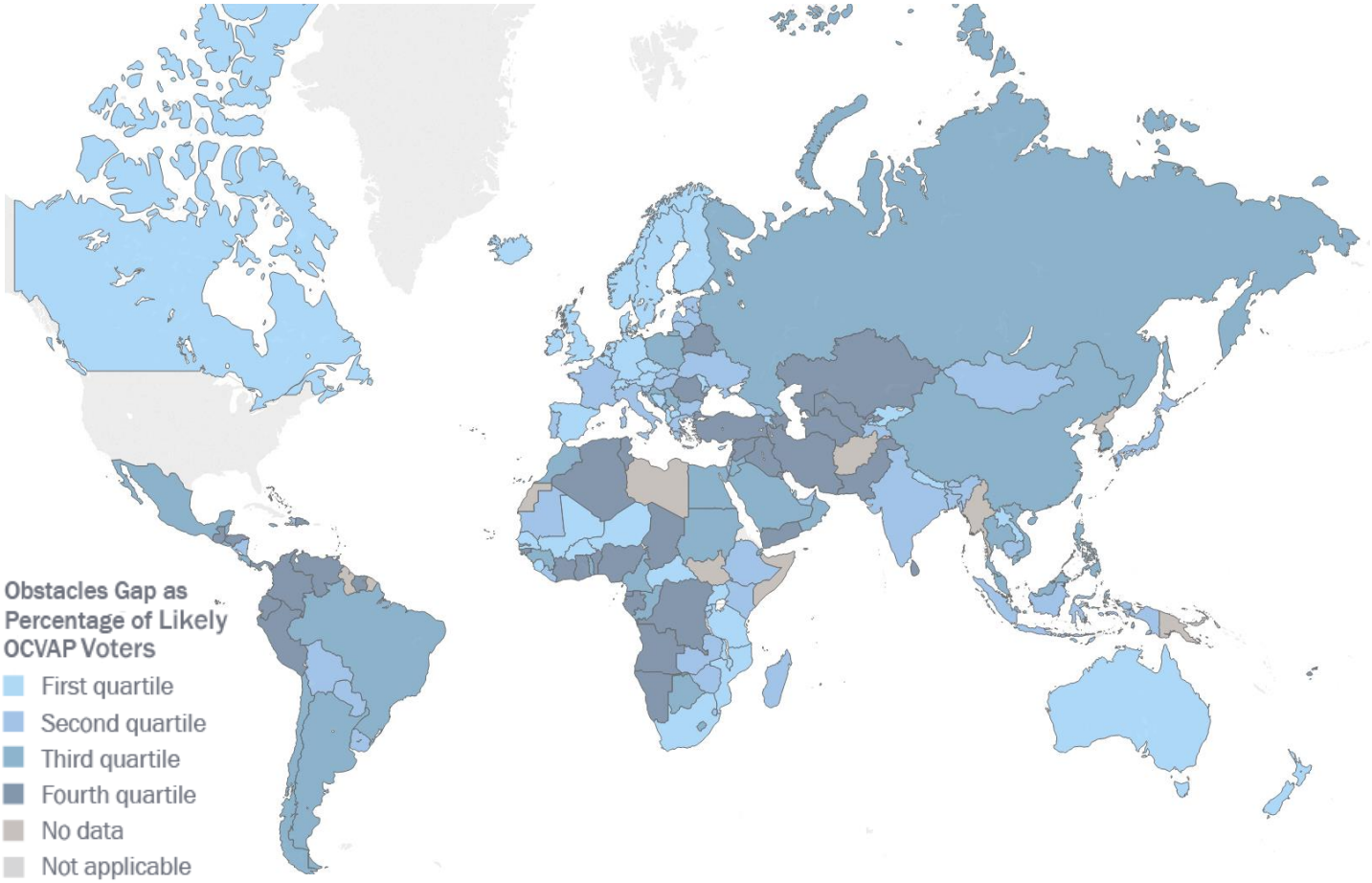
Country-specific obstacles gaps can be calculated by taking the differences in the observed vote rates by country and the estimated voting rate if obstacles were removed by country. As shown in Figure 6, high-obstacle countries are concentrated in Eastern Europe/Asia, Latin America, and Africa, regions generally associated with low levels of development.

**Figure 6. Obstacles Gap as Percentage of OCVAP by Country**



Countries with similar obstacles may have substantially different obstacles gaps because obstacles only prevent individuals who would have otherwise voted from doing so. In other words, the obstacles gap will be artificially inflated in countries where the OCVAP has a high propensity to vote. To control for differences in propensity across regions, the regional obstacles gaps can be divided by the total fraction of OCVAP in the region who the model predicts would have voted absent obstacles. Using this adjusted obstacles gap reveals that overseas citizens in South-Central Asia are most negatively affected by those obstacles, with obstacles preventing 86% of those who would have otherwise voted from doing so. However, even in Europe—the region with the lowest adjusted obstacles gap—more than half (76%) of OCVAP who are inclined to vote do not due to obstacles. Figure 7 presents the country-level estimates of this adjusted obstacles gap. These country-level estimates imply that participation rates by OCVAP residing in the Near East, South-Central Asia, and West Africa who otherwise would have voted are particularly negatively affected by OCVAP-specific obstacles to voting.

**Figure 7. Obstacles Gap as Percentage of Likely OCVAP Voters**

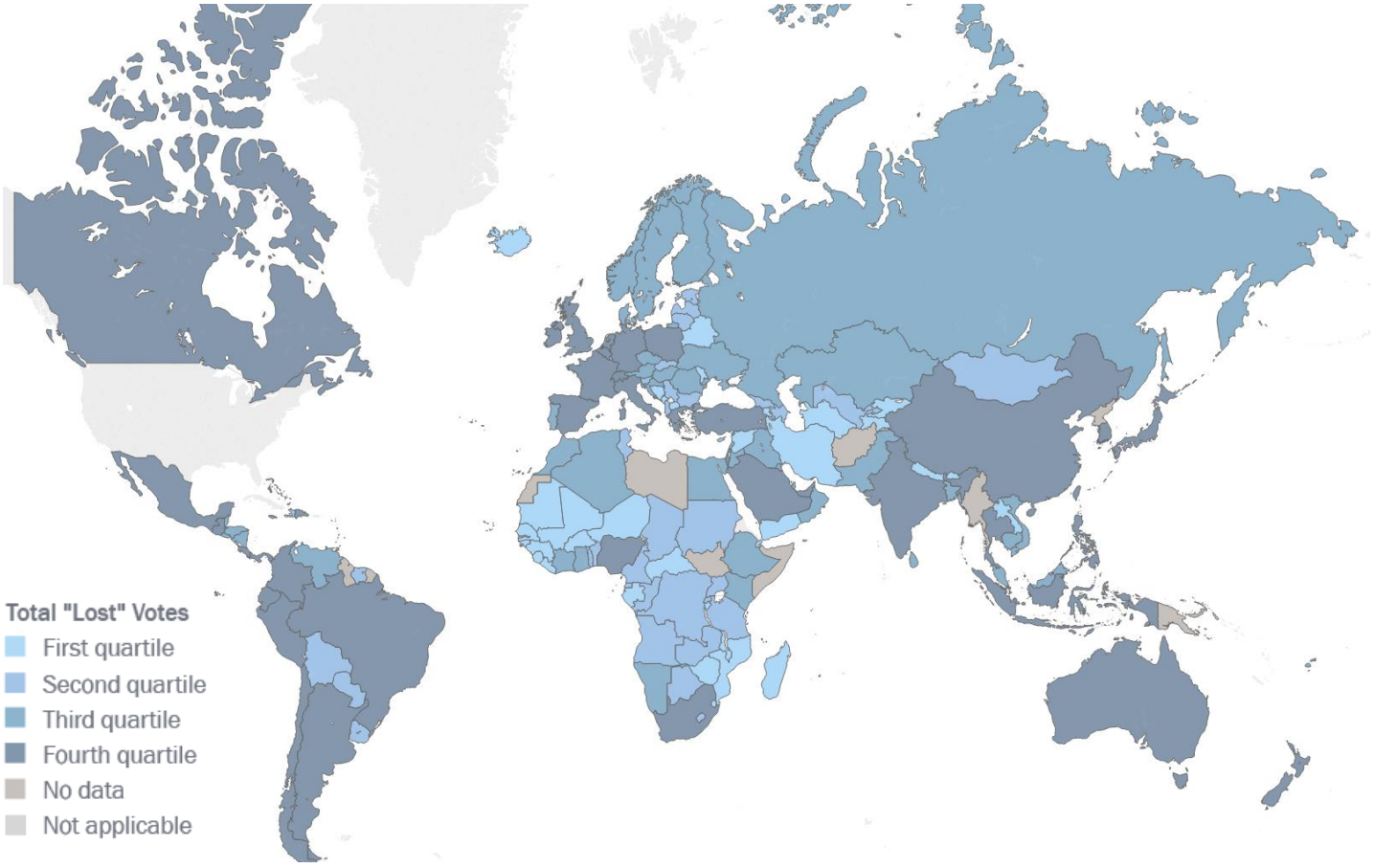


What implications does this have for the impact of obstacles on the overall number of votes coming from overseas citizens? A simple, more concrete way to conceptualize the impact of the obstacles gap is to calculate the number of votes "lost" from overseas citizens as a result of these obstacles to voting. Note that this does not refer to ballots actually being physically missing; rather, it is a way to conceptualize the number of votes that would have existed absent the obstacles to overseas voting that have been discussed.

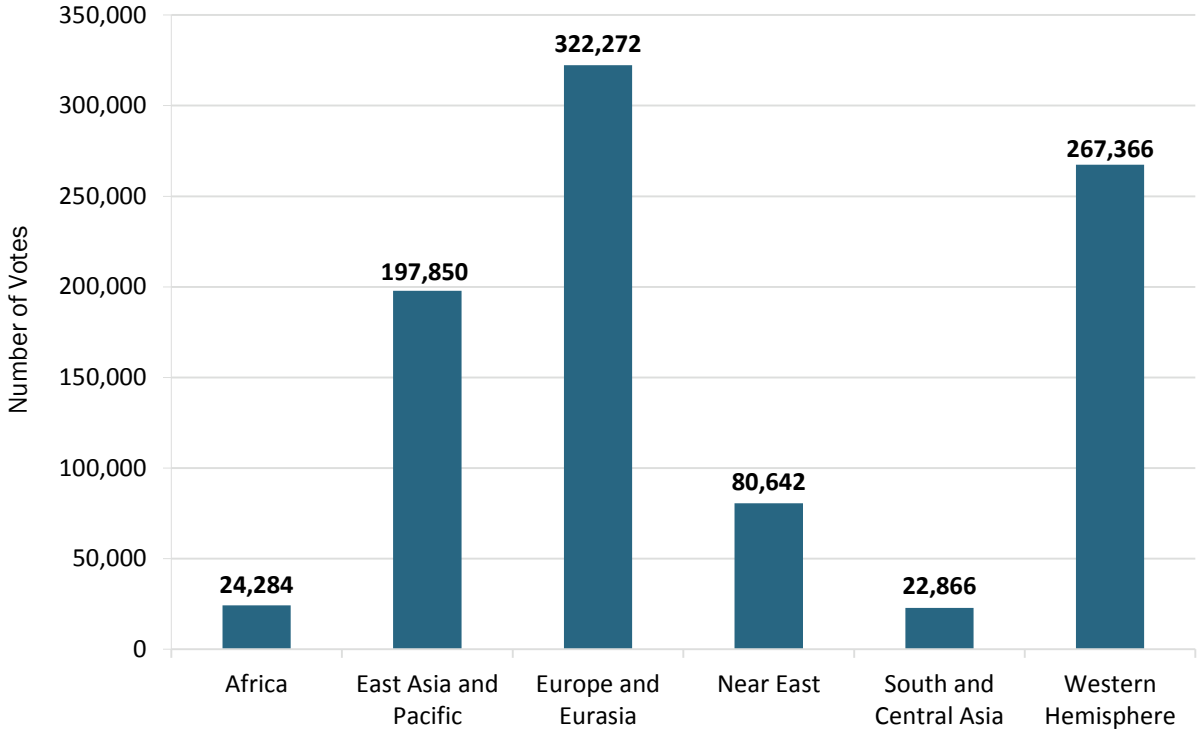
> *Estimated "lost" votes:* The total number of votes that would have existed if obstacles to overseas voting were removed. This is a way of conceptualizing the magnitude of impact that obstacles to voting have on the overseas citizen vote count.

Multiplying the number of eligible OCVAP in a country by its obstacles gap gives the estimated number of votes "lost." Although figures 5, 6, and 7 demonstrate that obstacles to voting are generally greatest in less developed areas, Figure 8 shows that the magnitude of their impact is lower there because of the smaller eligible populations. Although they are less prone to obstacles than less developed regions, Europe and the Western Hemisphere, particularly North America, have the largest numbers of lost votes due to their substantially larger voting-age populations. This again underscores the importance of addressing obstacles to voting even in more developed countries.

**Figure 8. Estimated Total "Lost" Votes by Country**



## Figure 9. Estimated "Lost" Votes Due to Obstacles by Region



## IMPACT OF CHANGES IN BALLOT DELIVERY AND RETURN MODES

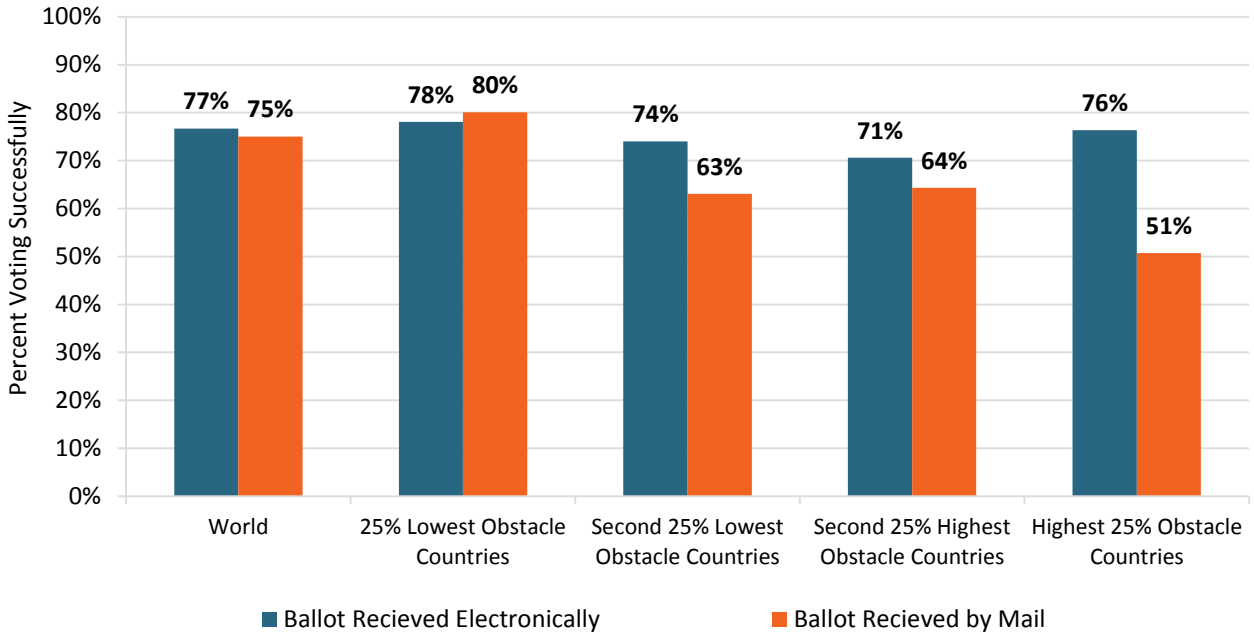
Obstacles associated with sending and receiving voting materials still preclude substantial numbers of overseas citizens from exercising their right to vote. However, provisions in the *MOVE Act* requiring each state to offer at least one electronic mode of ballot transmission were intended to mitigate these mailing obstacles by allowing overseas citizens to bypass the international mailing system and cut the overall transit time in half. Further, for potential overseas voters from some states, the availability of non–mail-based modes of return may further mitigate the impact of mailing-related obstacles, but further analysis is required.

Among absentee ballot requesters in the OCPS sample, 92% reported than they had submitted an absentee ballot for the 2016 General Election. Of those indicating voting and returning the ballot, 82% had a vote recorded in administrative vote history files. The rate of successful voting (i.e., the percentage of self-reported ballot returners identified as having cast a ballot in administrative records) varies across countries with differing obstacle levels. Among those in countries with the lowest level of obstacles, approximately 85% of self-reported voters have a successful vote recorded, as compared to 71% from countries with the highest level of voting obstacles.

Overall, 88% of those who reported requesting an absentee ballot said that they received their ballot for the 2016 General Election. Those from low-obstacle countries experienced fewer issues receiving their ballots—90% reporting receiving their ballot, as compared to 80% in high-obstacle countries. Among those who reported receiving a ballot, modes of receipt varied depending on the level of obstacles within a country. More than 60% of those in low-obstacle countries who received an absentee ballot reported doing so by mail. In the highest obstacle countries, less than one-half reported receiving their ballot by mail. As obstacles increased, so too did the percentage of overseas U.S. citizens who reported receiving absentee ballots through an electronic mode.

For those confronting greater voting obstacles in their country, the mode through which one receives an absentee ballot is related to the likelihood that one votes successfully. Overall, there is little difference observed in the rate of successful voting among those reporting electronic versus mail receipt of an absentee ballot. However, in countries with the highest estimated voting obstacles, those who receive their ballot electronically are approximately 50% more likely to have a vote recorded in administrative records than those receiving a ballot by mail.

## Figure 10. Ballot Receipt Mode and Success by Obstacles to Voting

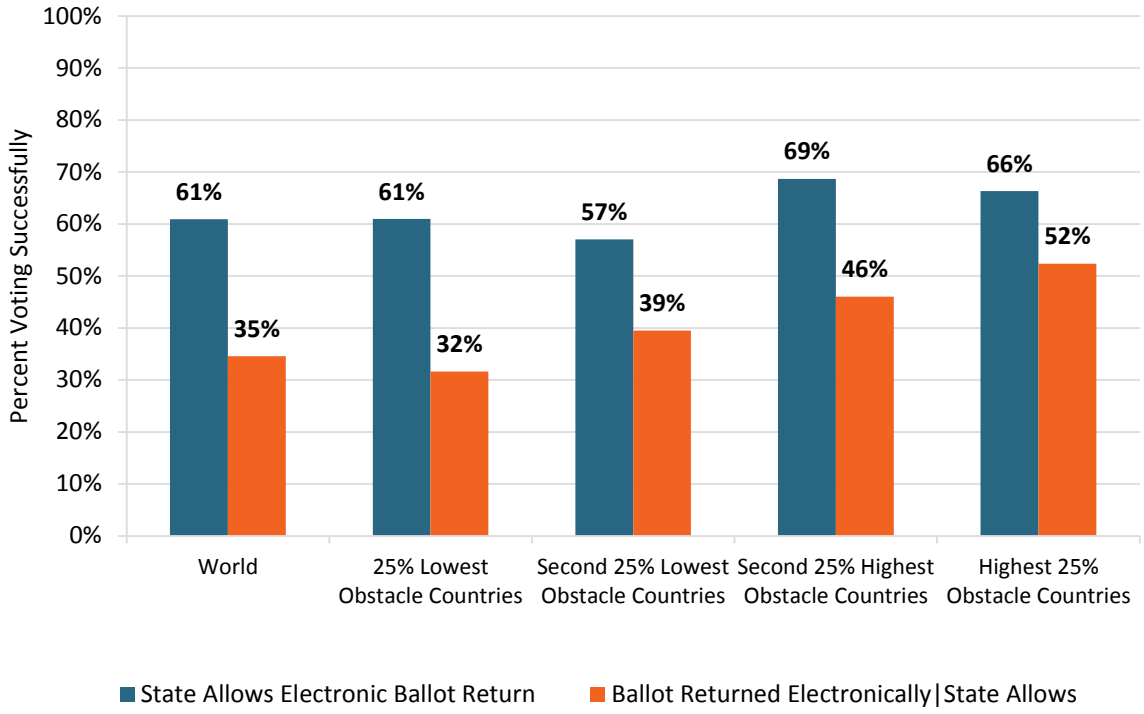



Although the *MOVE Act* requires all states to offer some form of electronic ballot transmission, some states have gone further, allowing overseas voters to return their ballots electronically. In 24 states and the District of Columbia, overseas voters are permitted to return their voted absentee ballot electronically—that is, through email, fax, or an online portal system.[9] To the degree that the ability to return a ballot electronically mitigates the influence of obstacles on voting rates, a natural question is, "Why is the global obstacles gap so high?" Two, non-mutually exclusive answers include: (1) many *UOCAVA* voters are from states that do not allow electronic ballot return; and (2) a lack of knowledge among those *UOCAVA* voters from states that do provide an electronic ballot return concerning the option to return a ballot electronically.

Evidence from this study supports that electronic ballot return minimized the effects of obstacles to voting in 2016. If electronic return mitigated obstacles to voting, then one would expect to observe not only a higher volume of absentee ballots returned, but also a disproportionate number of absentee ballot requests originating in states that allowed electronic ballot return. This is because electronic return is hypothesized to increase the probability that a ballot is returned successfully and, thus, individuals who can return electronically are more likely to perceive requesting an absentee ballot as worth the burdens associated with request. Thus, holding the distribution of *UOCAVA* in a country across states of legal residence constant, one would expect a positive association between ballot request and obstacles to voting. Overall, about 61% of ballot requestors responding to the survey were from states that had electronic ballot return options available. The percentage of ballot requesters from states with electronic return options increases as obstacle levels increase. Only 35% of ballot returners from states that allow electronic ballot return actually return their ballot electronically. The percentage of those using electronic return options, when voting in states where these options are available, also increases as obstacles increase. In the lowest obstacle countries, only about one-third take advantage of electronic return options available in their state. In countries with the highest voting obstacles, more than half use electronic return options allowed by their state.

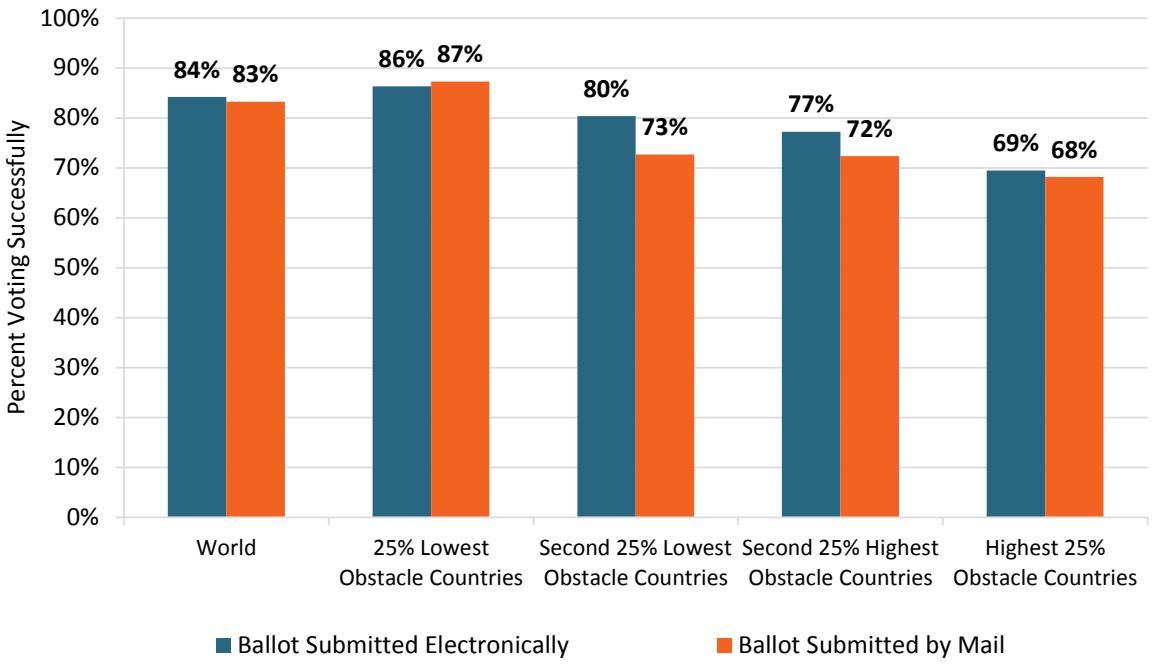
9 Based on data found in FVAP's 2016–2017 *Voting Assistance Guide* (https://www.fvap.gov/uploads/FVAP/Chapter-1/PreChapter1Web_20150930.pdf). More details on state-specific policies can be found in Appendix A.

## Figure 11. State Ballot Return Policy and Success by Level of Obstacles to Voting




A key question is whether or not the ability to vote successfully relates to the voting options one has available. Globally, there is no difference in the rate of voting success between those who report returning their absentee ballot by mail and those who report using an electronic method of ballot return.

## Figure 12. Ballot Return Mode and Success by Level of Obstacles to Voting




For OCPS respondents in the countries with high obstacles, the availability of electronic request, receipt, and return options is associated with a higher likelihood of success, although the difference in voting rates is not statistically significant for electronic return, perhaps due to the low number of respondents who returned a ballot from high-obstacle countries. By contrast, for those OCPS respondents in countries where obstacles to voting are relatively low, electronic return options actually are not associated with voting success. This counterintuitive result may be because those in high-obstacle places such as rural regions rely on alternatives to mail voting due to long mailing times, whereas those in low-obstacle countries such as capital cities are using these as a last resort, requesting and returning their ballots close to the election.

It is notable that even among those OCPS respondents who returned a ballot and for whom the option to return their ballot electronically was available, less than half chose to do so. This is true even in high-obstacle countries where one would expect electronic modes of return to be relatively effective at increasing the chances that a vote is counted. This may imply that many *UOCAVA* voters, even those whom are inclined to vote, are not aware of their options when it comes to modes of ballot return or may have other views on the relative success associated with electronic return. At a minimum, this research implies that procedural information is critical. Voters need to know what options are available, understand the obstacles that they face in the country they reside in, and understand how those obstacles can best be overcome. Exploring this phenomenon more deeply requires transactional data showing the dates and modes of ballot request and return, like that collected as part of the FVAP data standardization project, which examines customer interactions with local election offices more directly using administrative records.

# CONCLUSION AND IMPLICATIONS

This report analyzes the size and level of participation in the 2016 General Election of the population of voting age American citizens living abroad. FVAP is statutorily mandated to report on the overseas citizen absentee registration and voting rates, which has historically been difficult due to a lack of data on the size of the overseas voting population. This project is an effort to improve FVAP's mandatory reporting abilities and conduct additional, more detailed analysis of the overseas citizen voting population.

This study found that only approximately 6.9% of the 3 million OCVAP voted in the 2016 election, whereas approximately 72% of the domestic CVAP did so. Based on the estimated relationship between proxies for mail reliability and OCVAP voting rates across countries, approximately 37% of the OCVAP would have voted absent these obstacles to voting. This in turn implies that approximately half the voting gap is due to OCVAP- specific obstacles to voting.

This report also found that absentee voters who returned their ballot electronically were disproportionately concentrated in high-obstacle countries, consistent with electronic modes of ballot return mitigating the effect of mailing-related obstacles to voting. However, only a minority of voters who had the option to return their ballot electronically actually did so, with most still opting to return their ballot by mail. This speaks to a potential lack of awareness among absentee ballot returners concerning options for electronic modes of return—or larger concerns about electronic return. To the degree that those who lack awareness of effective modes of absent ballot request and return are less likely to even request an absentee ballot, a lack of procedural information among the broader OCVAP may explain at least part of the voting gap attributed to obstacles to voting. FVAP marketing efforts that target the broader OCVAP with information concerning options for modes of absentee ballot request, transmission, and return may mitigate this voting gap.

## Next Steps

Given the findings from this study, the following research and outreach activities are recommended as next steps:

1. **Ensure that overseas citizens are aware of all voting mode options available to them.** Obstacles associated with differences in postal system infrastructure around the world can create barriers to voting from overseas. For the subset of overseas voters who are aware of and make use of electronic voting options, these policies may help overcome the obstacles. However, many overseas voters may not be aware of the availability of electronic options for navigating the absentee voting process and how these might offer particular benefits to this at-risk population. FVAP and other elections stakeholders should ensure that overseas citizens are aware not only of their right to vote, but also of all the voting mode options available to *UOCAVA* voters in the state in which they vote.
2. **Promote use of the FPCA by overseas citizens as a means of registration and ballot request.** Awareness and use of the FPCA by *UOCAVA* voters can help guarantee overseas citizens are granted full *UOCAVA* protections. Use of the FPCA ensures that *UOCAVA* ballots are transmitted to voters no later than 45 days before an election, allowing overseas citizens more time to navigate the voting process regardless of the voting mode they use. Additionally, use of the FPCA allows overseas voters to select from all available ballot delivery methods, reinforcing the first point here.
3. **Assess overseas citizens' use of the FPCA versus state or other registration forms.** States differ in terms of the prerequisites for conveying *UOCAVA* protections. The extent to which

states consistently classify overseas voters as *UOCAVA* if they use the state form to register instead of the FPCA has not been studied in detail. Future research should examine these processes and the types of forms overseas citizens are using to register in order to determine the impact that states' practices are having on the overseas vote to ensure the broadest level of awareness of benefits enacted since the passage of the *MOVE Act* of 2009.

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# APPENDIX A: COUNTRY AND STATE CATEGORIES

## Countries and Regions

The 170 countries[10] and six major world regions used in this study are from the United States Department of State's official list of countries[11] and organization of world regions.[12] Areas missing from this list may not be officially recognized by the Department of State and, thus, were excluded from analysis due to challenges associated with collecting adequate data.

### Africa

Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo, Cote d'Ivoire, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, South Africa, Sudan, Swaziland, Tanzania, Togo, Uganda, Zambia, Zimbabwe

### East Asia

Australia, Brunei, Cambodia, China, Fiji, Hong Kong, Indonesia, Japan, Laos, Macau, Malaysia, Mongolia, New Zealand, Philippines, Singapore, South Korea, Taiwan, Thailand, Vietnam

### Europe and Eurasia

Albania, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Macedonia, Malta, Moldova, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, Yugoslavia

### Near East

Algeria, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates, Yemen

### South and Central Asia

Bangladesh, Bhutan, India, Kazakhstan, Kyrgyz Republic, Maldives, Nepal, Pakistan, Sri Lanka, Tajikistan, Turkmenistan, Uzbekistan

### Western Hemisphere

Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, Venezuela

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[10] Countries without estimates were those without sufficient data to predict the citizen population. See Volume 1, Chapter 1, for a list of country-level predictors.

11 https://www.state.gov/misc/list/index.htm

12 https://www.state.gov/countries/

## State *UOCAVA* Policies: Electronic Ballot Modes[13]

| State | Ballot Request | | | Ballot Transmission[14] | | | Ballot Return[15] | | |
|---|---|---|---|---|---|---|---|---|---|
| | Email | Fax | Online | Email | Fax | Online | Email | Fax | Online |
| Virgin Islands | X | X | | X | X | X | X | X | |
| Guam | X | X | | X | X | X | | | |
| American Samoa | X | X | | X | X | X | | | |
| Puerto Rico | X | X | | X | | X | | | |
| Alaska | X | X | | X | X | X | | X | X |
| Alabama | | | | X | | X | | | |
| Arkansas | | | | X | | X | | | |
| Arizona | X | X | | X | X | X | | X | X |
| California | X[16] | X | | X | X | X | | X | |
| Colorado | X | X | | X | X | X | X | X | |
| Connecticut | | | | X | X | X | | | |
| District of Columbia | X | X | | X | X | X | X | X | |
| Delaware | X | X | | X | X | X | X | X | |
| Florida | X[17] | X | | X | X | X | | X | |
| Georgia | X | X | | X | | X | | | |
| Hawaii | X | X | | X | X | X | | | |
| Iowa | X | X | | X | X | X | | | |
| Idaho | X | X | | X | X | X | | | |
| Illinois | X | X | | X | X | X | | | |
| Indiana | X | X | | X | X | X | X | X | |
| Kansas | X | X | | X | X | X | X | X | |
| Kentucky | X | X | | X | X | X | | | |
| Louisiana | | X | | X | X | X | | X | |
| Massachusetts | X | X | | X | X | X | X | X | |
| Maryland | X | X | | X | X | X | | | |
| Maine | X | X | | X | X | X | X | X | |
| Michigan | X | X | | X | X | X | | | |
| Minnesota | X | X | | X | X | X | | | |
| Missouri | X | X | | X | X | X | | | |
| Mississippi | X | X | | X | X | X | X | X | |
| Montana | X | X | | X | X | X | X | X | |
| North Carolina | X | X | | X | X | X | X | X | |
| North Dakota | X | X | | X | X | X | X | X | X |
| Nebraska | X | X | | X | X | X | | X | |
| New Hampshire | X | X | | X | X | X | | | |
| New Jersey | X | X | | X | X | X | | | |
| New Mexico | X | X | | X | X | X | X | X | |

13 Based on data found in FVAP's 2016-2017 *Voting Assistance Guide* (https://www.fvap.gov/uploads/FVAP/Chapter-1/PreChapter1Web_20150930.pdf).

14 Here, ballot transmission refers to the mode by which an election office sends a blank ballot out to a voter.

15 Here, ballot return refers to the mode by which a voter sends his or her completed ballot back to an election office to be counted.

16 In California, the FPCA can only be returned by email if an individual has previously registered. First-time voters cannot return their FPCA by email.

17 In Florida, the FPCA can only be returned by email if an individual has previously registered. First-time voters cannot return their FPCA by email.

| State | Ballot Request | | | Ballot Transmission[14] | | | Ballot Return[15] | | |
|---|---|---|---|---|---|---|---|---|---|
| | Email | Fax | Online | Email | Fax | Online | Email | Fax | Online |
| Nevada | X | X | | X | X | X | X | X | |
| New York | X | X | | X | X | X | | | |
| Ohio | X | X | | X | X | X | | | |
| Oklahoma | X | X | | X | | X | | X | |
| Oregon | X | X | | X | X | X | X | X | |
| Pennsylvania | X | X | | X | | X | | | |
| Rhode Island | | X | | X | X | X | | X | |
| South Carolina | X | X | | X | X | X | X | X | |
| South Dakota | X | X | | X | X | X | | | |
| Tennessee | X | X | | X | | X | | | |
| Texas | X | X | | X | | X | | | |
| Utah | X | X | | X | X | X | X | X | |
| Virginia | X | X | | X | X | X | | | |
| Vermont | | | | X | X | X | | | |
| Washington | X | X | | X | X | X | X | X | |
| Wisconsin | X | X | | X | X | X | | | |
| West Virginia | X | X | | X | X | X | X | X | |
| Wyoming | X | X | | X | X | X | | | |

## APPENDIX B: VARIABLES USED IN THE MODEL OF COUNTRY-LEVEL VOTING RATES

| Variable | Description | Source(s) |
|---|---|---|
| **Dependent Variable** | | |
| Vote Rate | # of Votes counted in 2016 General Election originating from host country/# of Voting-Age Eligible Population residing in host country in 2016. | Numerator is taken from OCPS frame. See Chapter 3 of Volume 2; denominator is imputed using model-averaging methodology. See Chapter 1 of Volume 2. |
| **Proxies for Obstacles to Voting** | | |
| Worldwide Governance Indicators | Mean of 1996–2016 averages of World Bank's Worldwide Governance Indicators | World Bank. See Chapter 1 of Volume 2. |
| Ln(Minimum Time to Respond) | Natural log of number of days that passed between when invitations to participate in the OCPS were sent and the first survey start from a respondent in the country who was contacted by mail. | Computed from the OCPS using start date. See text. |
| **Control Variables** | | |
| Ln(Distance to the United States) | Natural log of minimum straight line distance between U.S.–host country agglomeration pair. Agglomerations are taken from 2014 United Nations Urbanization Prospects. | City agglomerations and their locations are taken from the United Nation Urbanization Prospects. See Chapter 1 of Volume 2 |
| Ln(GDP per capita), U.S. – Ln(GDP per capita), Host Country | Difference in natural log of GDP per capita of the host country and that of the U.S. in 2016. | Penn World Tables. See Chapter 1 of Volume 2. |
| English | Indicator for whether English is a primary language in the country. | Ethnologue. See Chapter 1 of Volume 2. |
| Spanish | Indicator for whether Spanish is a primary language in the country | Ethnologue. See Chapter 1 of Volume 2. |
| Region of the World | Indicators for the country's region of the world as defined by the U.S. Department of State. | U.S. Department of State |
| Fraction of CVAP with Post-Secondary Education | Fraction of eligible population in the country with post-secondary educational attainment. | Imputed as part of OCPA. See Chapter 1 of Volume 2. |
| Fraction of CVAP that is Male | Fraction of eligible population in the country that is male. | Imputed as part of OCPA. See Chapter 1 of Volume 2. |
| Fraction of CVAP, Age 25–64 | Fraction of eligible population in the country whose age is between 25 and 64. | Imputed as part of OCPA. See Chapter 1 of Volume 2. |
| Fraction of CVAP, Age 65+ | Fraction of eligible population in the country whose age is 65 or greater. | Imputed as part of OCPA. See Chapter 1 of Volume 2. |
| Ln(Eligible Population) | Natural log of # of Voting Age-Eligible Population residing in host | Imputed using model-averaging methodology. |

| | | |
|---|---|---|
| | country in 2016. | See Chapter 1 of Volume 2. |
| Ln(Country Population) | Natural log of country's total population. | Penn World Tables. See Chapter 1 of Volume 2. |

## APPENDIX C: VOTING GAP DECOMPOSITION METHODOLOGY

This appendix presents the model used to generate predictions of the obstacles gap. The following model is fitted using Fractional Logistic regression:[18]

$$Voting\ Rate_i = \frac{e^{\beta_1 Ln(Min\ Mailing\ Time)_i + \beta_2 WGI_i + \beta_3 (Ln(Min\ Mailing\ Time)_i * WGI_i) + \beta X_i + constant}}{1 + e^{\beta_1 Ln(Min\ Mailing\ Time)_i + \beta_2 WGI_i + \beta_3 (Ln(Min\ Mailing\ Time)_i * WGI_i) + \beta X_i + constant}}$$

$Voting\ Rate_i$ is the 2016 voting rates of OCVAP residing in country i.

Obstacles are operationalized by two variables: $Ln(Min\ Mailing\ Time)_i$ is the natural log of the minimum time it took an OCPS respondent to respond to the survey after invitations to take the survey were mailed, a proxy for between-country mailing times.[19] This variable captures the influence of mailing times between the United States and the country of residence on the probability that someone votes. The second variable is the country's mean Worldwide Governance Indicator (WGI), which is an index of governance quality based on multiple surveys and expert opinions (see Volume 2). The WGI captures various institutional and infrastructural aspects of a country that may impact the probability that a blank requested ballot is received by a *UOCAVA* voter once entering the country of residence or a completed ballot successfully leaves the country of residence. These may include various aspects of mail reliability (e.g., road quality/mail transport time, mail theft, government censorship). Because between-country mailing times would conceivably only influence the probability that a ballot is received and returned on time if the ballot successfully navigates the mailing system of the country of residence, the effect of between-country mailing times is allowed to vary based on the country's WGI.

$X_i$ are a set of control variables that might be related to differences in the perceived benefit of voting across countries. These include: Ln(distance between the country and the U.S.); difference in Ln(GDP per capita) between host country and the United States; indicators for whether the country speaks English or Spanish; U.S. Department of State's region of the world indicators; the imputed fraction of OCVAP with post-secondary education; imputed fraction of OCVAP that is male; and the imputed fractions of population that is ages 25–64 and 65+. Description as sources for the predictor variables are reported in Appendix A.

Once the model is fitted, predictions for what each country's voting rate would have been if (1) OCPS mailing times were only 6 days (the minimum mailing time observed in the data) for all countries, and (2) WGI for all countries was that of the country with the max WGI. [20] The estimate of obstacle-free OCVAP voting rate is the average of these predicted voting rates weighted by the size of the eligible population. In other words, the model is used to predict what participation would be if long mailing times or mail unreliability were not an obstacle to OCVAP voting.

18 Model fit using Stata's fracreg command. Countries are weighted by the size of their estimated OCVAP. The sample is weighted in order to mitigate the effect of sampling variability associated with low-population countries and obtain a representative estimate of the effect of obstacles to voting on vote rates.

19 This variable is not available for countries for which there was not at least one OCPS respondent. For these countries, this variable was imputed through a linear regression model, in which the predictor included (logged) distance between the country and the United States; difference in (logged) GDP per capita between the country and the United States; mean WGI; and region of the world fixed effects.

20 In practice, generating this prediction involves adjusting the log-odds of voting in the country for a change in obstacle variables. For countries with zero votes, the voting rate is zero and the log-odds are undefined. For these countries, the baseline (before adjustment) log-odds were set such that the implied voting rate was 1%.

# APPENDIX D: EVIDENCE FOR OBSTACLES TO VOTING USING EVIDENCE FROM AROUND TIME OF MIGRATION

This appendix presents evidence that the voting gap is at least partly explained by obstacles to voting and not just differences in motivation to vote. The methodology involves comparing voting rates from the 2012 General Election of individuals who had recently emigrated (recent migrants) from the United States and are thus outside the United States to a group that had not yet emigrated but would soon do so (future migrants).[21] Because individuals in both groups emigrated around the same time, differences in voting rates are less likely to be explained by pre-emigration differences in motivation to vote. And because individuals in the OCVAP group comprise recent migrants, it is unlikely that the overseas group's motivation to vote has been affected by spending a long period outside the United States. For these reasons, the differences in voting rates can be plausibly attributed to obstacles to voting associated with residing outside the United States.

Data used in this analysis are drawn from the OCPS sample. A benefit of this survey is that it includes detailed questions about individuals' migration history, which allows the determination of whether a respondent was residing within the United States or within their 2016 country of residence for each midterm and presidential election in the period 2000–2014. In addition, vote history for the OCPS sample is available for many respondents for the period 2000–2016, which allows one to account for any differences in vote history for each group in the period before migration. The OCPS subsample used for this analysis includes respondents who were residing in the United States in November 2010 and whose only post-2010 destination country was their 2016 country of residence. Within this sample, the 2012 voting rates of individuals who report in the United States in November 2012 is compared to that of individuals who resided in their 2016 country of residence in November 2012.

Specifically, the data for this subsample are used to fit the following logistic model:

$$P(Voted_{2012}|Overseas_{2010}=0) = \frac{e^{\beta_1 Overseas_{2012}+\beta_2 Voted_{2010}+\beta_3 Voted_{2008}+\beta_4 Voted_{2010}*Voted_{2008}+\beta X}}{1+e^{\beta_1 Overseas_{2012}+\beta_2 Voted_{2010}+\beta_3 Voted_{2008}+\beta_4 Voted_{2010}*Voted_{2008}+\beta X}}$$

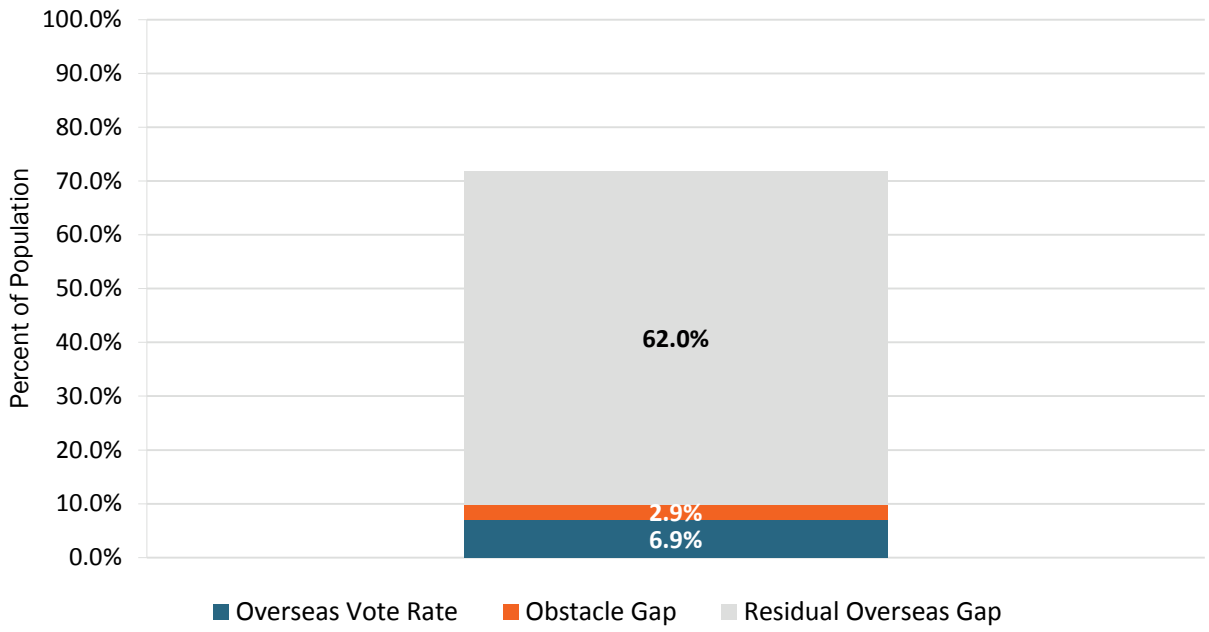
In which X includes a set of demographic and geographic controls (age, age squared, gender, race/ethnicity, educational attainment, and 2016 state of legal residence). The estimation sample is weighted such that both the overseas and U.S. groups are representative of the 2016 total eligible population with respect to the WGI, mailing time, and region of their 2016 country of residence.

The model is then used to generate predicted voting rates assuming the entire estimation sample is overseas (49%) or in the United States (66%). The estimated voting rates imply that for every overseas voter, there were 1.34 (i.e., 66%/49%) overseas residents who would have voted had they been in the United States. Given that the estimated participation rate of the OCVAP was 6.9%, this implies that if there were no obstacles that were specific to overseas voting, the participation

21 One concern with this strategy is that the estimate may be capturing the effect of mobility, rather than overseas obstacles per se. To mitigate this concern, a similar model is estimated, but restricted to OCPS respondents who were outside the United States in 2010. Individuals who remained outside the United States are thus compared to those who returned to the United States between November 2010 and November 2012. If mobility were driving the results, then the overseas group would be expected to have a higher predicted probability of voting, because they were immobile relative to the domestic group. The conditional difference in probability between the two groups is not statistically significantly different from zero. This is likely due to the small number of individuals who returned to the United States in the sample. However, the point estimates indicate lower voting rates among the overseas group, which is consistent with the effect of being outside the United States, rather than mobility.

rate would have been 9.3%. The implied obstacles gap is 2.9 percentage points whereas the implied residual gap was 62 percentage points. This decomposition is also consistent with differences in motivation, explaining the overwhelming majority of the voting gap between the OCVAP and non-*UOCAVA* CVAP population.

**Figure D1. Decomposition of the Voting Gap using Migrant Sub-Sample**




However, there is strong reason to believe that the obstacles gap is underestimated and the residual gap overestimated when using this methodology. The primary drawback of this methodology is that the OCPS sample is drawn from the population of overseas absentee ballot requesters in 2016. These are individuals who requested an absentee ballot in 2016, and thus might not be representative of the overseas eligible population with respect to obstacles to voting or motivation to vote. Specifically, because OCPS respondents attempted to vote and successfully requested an absentee ballot, the obstacles to voting associate with residing outside the United States for these individuals may be less likely to affect the voting rate than the general eligible population. This is because absentee ballot requesters perceived enough benefit in voting that they would attempt to vote regardless. It implies that the resulting obstacles gap is underestimated and the residual gap overestimated. A related concern is that, because data on voting come from the 2012 election, obstacles and motivation of the OCVAP in 2012 may not be representative of obstacles and motivation in 2016. Also, the FPCA, FWAB, and other voting resources are not consistently available in languages other than English, and the survey was conducted only in English; therefore, obstacles related to support for limited English proficiency overseas voters may not be fully captured.

The primary benefit of this decomposition methodology over the other cross-country methodology presented in the main body of the text is that it uses information about the actual voting behavior of a U.S. group that is comparable to the geographically representative overseas population. This means the counterfactual voting rate is independent of the overseas-specific obstacles to voting, unlike the counterfactual absentee ballot request rate generated from the cross-country model. This is because all the data come from individuals who are residing outside the United States and

probably still reflect obstacles to voting. In addition, although individuals residing in high- and low-obstacle countries may differ with respect to features associated with the motivation to vote, the two weighted samples compared in the migration analysis are similar with respect to the timing of their migration as well as features of their destination countries, and thus are less likely to differ with respect to motivation to vote.

## APPENDIX E: ADMINISTRATIVE DOMESTIC CVAP VOTING RATE

As discussed in the main body of this report, our baseline *UOCAVA* CVAP participation rate is based on various administrative data, whereas our baseline domestic CVAP participation rate is based on self-reported participation taken from survey data. This section presents alternative estimates of the participation rate based on an administrative-based estimate of the domestic CVAP participation rate. To obtain an administrative-based estimate of the participation rate for the domestic CVAP, this report uses data from the United States Elections Project (USEP).[22]

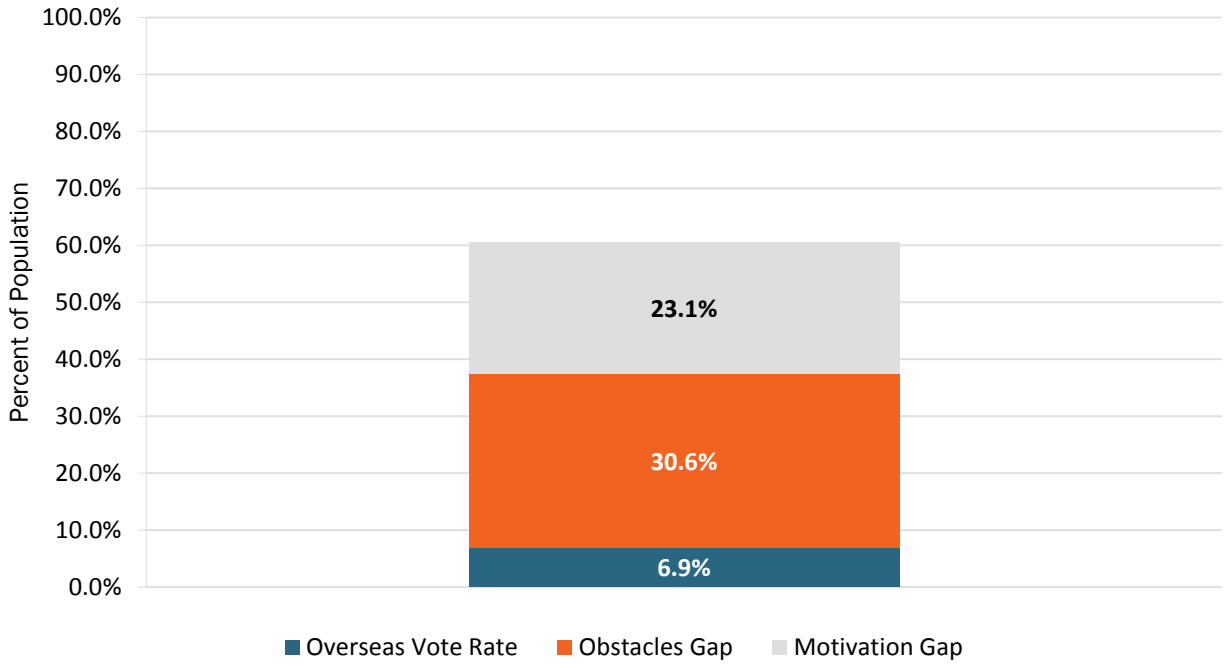
The starting point for the size of the domestic CVAP is the domestic voting-age population, which the USEP reports as being 250,055,734. Then, the approximately 8.4% of this population that are non-citizens are excluded, resulting in an estimated voting age citizen population of 229,051,052. Because the comparison of interest is to CVAP that have an option to vote non-absentee, this count is further reduced by excluding the domestic *UOCAVA* active duty military (ADM) population. To obtain an estimate of this population, the sum of nonresponse/poststratification weights for respondents to the 2016 Post-Election Voting Survey of Active Duty Military (PEVS-ADM) who report being in the United States as of November 2016, but who were more than 50 miles from their legal voting residence is used (approximately 666,095). This results in a total domestic CVAP of approximately 228,384,958.

For the total number of votes attributable to this population, the starting point is the 138,846,571 votes counted in the 2016 General Election. From this total, the approximately 208,328 votes attributed to the OCVAP are subtracted. In addition, votes attributed in domestic ADM are excluded. Specifically, as part of the collection of overseas *UOCAVA* records from state and local election officials, records for ADM were collected. As a result, an additional 213,476 votes are excluded, resulting in a final estimate of 138,424,767 votes originating from the domestic CVAP.

To calculate the participation rate for the domestic population, the total 138,424,767 votes cast are divided by the estimated size of the domestic population. This results in an estimated domestic participation rate of approximately 61%. Figure E1 presents an alternative decomposition based on the baseline administrative domestic CVAP participation rate. The primary difference between the decompositions using the survey and administrative domestic CVAP participation rates is that a smaller fraction of the gap in the administrative-based decomposition is ascribed to differences in motivation between the two populations.

[22] Data available at www.electproject.org

## Figure E1. Decomposition using Administrative Domestic CVAP Participation Rate



## APPENDIX F: VOTING GAPS UNDER ALTERNATIVE OCVAP VOTING RATES

The baseline estimates for the participation rates for the OCVAP and domestic CVAP reveal a voting gap between the two populations of approximately 65 percentage points. Put another way, these initial estimates imply that the domestic population is approximately nine times more likely to vote.

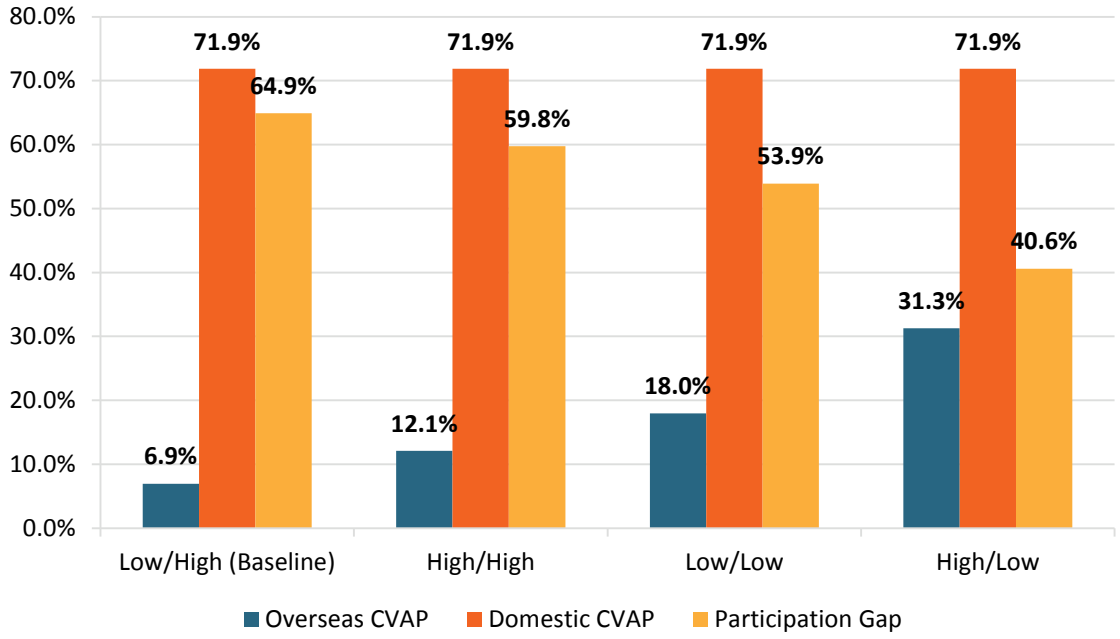
To test whether the magnitude of the estimated gap is sensitive to the choices concerning how to measure the participation rate, alternative measures of the numerator (number of votes) and denominator (size of the population) are employed. Specifically, the baseline numerator for the OCVAP participation rate is used as a "Low" estimate, whereas the baseline denominator is defined as the "High" estimate. "High" and "Low" estimates of the numerator and denominator, respectively, are then substituted into the OCVAP participation rate to observe how small the voting gap can conceivably be.

For the "High" estimate of the numerator, the count of returned and non-rejected regular absentee ballots and FWABs from FVAP's 2016 Quantitative Local Election Officials Survey (362,746) is used. This count is not used as the baseline numerator because it is likely inflated by (1) the fact that it is unclear what criteria the state election officials (SEO) and local election officials (LEO) who responded to the survey used to identify civilian *UOCAVA*, and (2) some degree of double-counting between different fields of the survey. These problems are less severe with the individual-level data used to generate the baseline numerator, although it is conceivable that the LEO survey count includes votes that were not identified in the search of absentee ballot request/return files.

For the "Low" estimate of the denominator of the OCVAP participation rate, the total number of individuals who are estimated to have reported foreign income to the IRS or individuals who claimed social security benefits from an overseas address (1,159,620 in 2016) is used. This is not used as a baseline estimate because it is almost surely an undercount, which only includes individuals who (1) are employed or retired, and (2) reside overseas for a long enough period of time to make their overseas address their permanent address.

Alternative participation rates for the OCVAP based on different combinations of "High" and "Low" numerators and denominators are presented in Figure F1. Regardless of how the participation rate is measured, the voting gap between the OCVAP and domestic CVAP population remains considerable. Even under the highest estimate of the OCVAP participation rate, domestic CVAP are almost twice as likely to have voted in 2016 that OCVAP. The estimates are thus consistent with the existence of a substantial difference in the level of participation between the two populations.

## Figure F1. Voting Gap under Different Assumptions




Voting Gap under different sets of Numerator-Denominator.



2016 Overseas Citizen Population Analysis

# TECHNICAL REPORT

***Volume 2***

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# DATA AND METHODOLOGY FOR DEVELOPING COUNTRY-LEVEL ESTIMATES OF POPULATION OF U.S. CITIZENS

In general, the U.S. Government does not keep track of where U.S. citizens travel overseas, or where they might be living, working, or studying while overseas. For some nations, it is likely that data on the number of U.S. citizens currently in their country do exist; countries with visa requirements for entry and exit, such as China, should be able to provide information on the number of U.S. citizens in their country at any given time. However, it is not always possible to gain access to these data. Thus, there is no exact count of the total number of overseas citizens; nor do many other nations produce a consistent enumeration of the number of overseas citizens who live within their borders.

Because of these issues and others discussed below, the Fors Marsh Group (FMG) Team had to estimate the number of overseas citizens in any given country to be able to accurately measure voter participation among overseas U.S. citizens. These estimates were generated using three primary data sources: foreign country data on the number of U.S. citizens living in foreign countries' borders, U.S. Government administrative data on overseas citizens, and data from academic studies that have examined factors that affect the number of U.S. citizens living in any given country around the world.

The groundwork for this analysis was laid in 2015 when the FMG Team conducted this analysis for the 2014 election and was refreshed to produce the updated estimates for the 2016 election. This section discusses the data collection, imputation, and estimation methodology from 2015, as well as how it was updated to produce new estimates for the 2016 election.

## Foreign Government Estimates (FGE) of their U.S. Citizen Population

There are several sources for FGEs of the U.S. citizens living in each country. The FGEs used in the analyses come from several sources: (1) the Organisation for Economic Co-operation and Development (OECD) International Migration Database, which provides data on the number of U.S. citizens during the years 2000 to 2010 for most OECD countries; (2) countries' national statistical agencies ; and (3) a U.S. Census Bureau internal document titled, "Estimating Native Emigration from the United States," which was compiled as part of a project to estimate U.S. net emigration.

The primary methods that foreign governments use to track the population of U.S. citizens in their country are censuses and registries. The FMG Team used both census and registry data, in addition to an indicator variable, to account for the difference in collection method. Countries vary in who they consider to be a U.S. citizen for purposes of a census or registry. Some countries count only U.S. citizens and others count only individuals born in the United States. The groups defined by these two criteria have significant overlap, but a small proportion of individuals belong to only one of those groups. The FMG Team accounted for this discrepancy by having an indicator variable for whether the country uses U.S. citizens or U.S.-born individuals, allowing ultimately for the estimation of the number of U.S. citizens, despite this variation by country. Because countries that allow dual citizenship may undercount resident U.S. citizens by counting dual citizens as their own, a variable was created to indicate countries that allow their citizens to maintain dual citizenship with the United States.

## Foreign Government Estimates (FGE)

*The term "foreign government estimate" (FGE) will be used throughout this report. These estimates refer to two different concepts, depending on the context. First, FGEs are the data that foreign governments have, through registries and census, on the number of U.S. citizens living in their country. Second, the term FGE is used to describe the updated estimates we generate for all countries—for those who have FGE data and those for whom we have to fully estimate the U.S. citizen population living in their country.*

## Census versus Registry

*This report also uses the terms "census" and "registry, and it is important to understand the distinction between the two.*

- *A census is a country-wide, periodic data collection that tallies all residents.*
- *A registry is a compilation of administrative records from numerous sources.*

*Registries may provide more complete counts if they are updated often and if they are drawn from several different sources (such as tax records, visas, school forms, etc.). One major disadvantage of registries is that U.S. citizens may continue to appear on a foreign registry for several years after they no longer reside in that country.*

Some countries use ambiguous terminology, meaning it could not always be determined if a country was measuring U.S. citizens or U.S.-born individuals. The country of Kiribati in the Central Pacific serves as such an example. In Kiribati's census questionnaire, individuals are asked to list their "home country," but further clarification is not offered on whether the term refers to the individual's country of birth, country of citizenship, or an alternative definition. Other countries instead ask for each individual's nationality, but again do not specify how they define nationality. When these cases could not be resolved with certainty, they were excluded from the analysis.

FGEs are not available for every country, and many release estimates on a cycle of every five or 10 years. In addition, some countries with complete data—foreign government data on U.S. citizens in their country, U.S. administrative data, and all other variables—still have errors in their FGEs because of the differences between registries and censuses. To have a complete and accurate estimate of the total number of overseas U.S. citizens, the FMG Team estimated models to generate FGEs for all countries—those with complete data including FGE and those without an FGE. To accomplish this, U.S. administrative data on overseas citizens were collected, as well as additional predictors that research has demonstrated to be correlated with migration.

## U.S. Administrative Records on Overseas Citizens

Several federal agencies collect data on overseas citizens and release statistics about subsets of that population. The FMG Team used these data to estimate the total number of U.S. citizens in a given country. The key administrative data used were:

Number of U.S. Exchange Students, 2000–2017: This is the total number of U.S. exchange students attending foreign universities in each country for each year during the period 2000–2017.

Number of Social Security Beneficiaries, 2000–2017: This is the number of overseas Social Security beneficiaries, as reported annually by the U.S. Social Security Administration (SSA). Counts were available for each year during the period 2000–2017.

Number of Foreign Earned Income Returns, 2000–2011: This is the estimated number of Internal Revenue Service (IRS) Form 2555 returns (used to declare foreign income) filed by U.S. citizens living in a country in a given year (Hollenbeck & Kahr, 2009). Each form represents at least one U.S. citizen residing in the country. Data were not available for some countries, and for the subset of countries with estimates, they were only available for 1996, 2001, 2006, and 2011. Data were available on either a by- country or by-region basis.

Number of Civilian U.S. Federal Government Employees, 2000–2017: The number of civilian U.S. Federal Government employees

residing in a country in a given year, as reported to the Federal Voting Assistance Program (FVAP) by the Office of Personnel Management (OPM).

There are additional administrative records in existence, such as overseas deaths, consulate registrations, and counts of military personnel. However, these data sources were not incorporated into this analysis for several reasons. Some of these data are classified, sensitive, or otherwise not available to the general public; including them in the analysis would have precluded other researchers from reproducing the results and, thus, undermined the transparency of these analyses. Another concern is that these additional sources of data are likely to be quite strongly associated with tourism or military presence, rather than resident citizens, and that including them would add error by overestimating the number of U.S. citizens in countries with a military presence or a high volume of tourists from the United States.

## Filling the Data Gap—Imputation and Estimation

Most modeling techniques require the predictor fields to be completely populated. Therefore, to be able to use the administrative data to model the U.S. overseas citizen population, missing data had to be addressed. In other countries, especially countries with low government capacity and with smaller populations, FGEs may be incomplete or nonexistent. Data from smaller countries may not be available because, as a rule, the U.S. Government does not report data when too few people meet a certain criteria. For example, there may be such a small number of U.S. tax filers living in East Timor that the Government does not release records for East Timor because of privacy considerations. It is probable that missing data is thus also correlated with migration, meaning that simply dropping country-years with missing data or filling them in with the mean would introduce bias into the estimates.

To be able to model the full set of country-years without biasing the estimates, additional data were collected to impute the missing data. As the OECD explains, "Imputation is the process used to determine and assign replacement values for missing, invalid or inconsistent data [...] This is done by changing some of the responses or assigning values when they are missing [...] to ensure that estimates are of high quality and that a plausible, internally consistent record is created."

The FMG Team imputed missing U.S. administrative data by creating a predictive model that relies on variables known to be associated with higher levels of migration between countries. These mobility variables include:

The Difference Between Foreign Country and U.S. Real Gross Domestic Product (GDP) at Chained Purchasing Power Parities (PPP): This variable is the difference between the PPP-converted expenditure-side real GDP of the foreign country and the United States in a given year in constant 2011, as reported by Penn World Table Version 9.0 (Heston, Summers, & Aten, 2012). Research shows that countries with more favorable economic conditions are more attractive to U.S. citizens and, thus, have larger U.S. citizen populations.

Population: This variable refers to the population of the foreign country, as reported in the Penn World Table Version 9.0 (Heston et al., 2012). The literature on international migration has typically found that countries with larger populations and economies tend to attract more migrants (Lewer & Van den Berg, 2008).

Distance From the United States: This variable is the distance between the closest foreign city and U.S. city that both have a population over 750,000. For countries that do not have a city with a population over 750,000, the distance between the capital city of the foreign country and the closest U.S. city with a population of at least 750,000 was used. Distance has typically been found to be associated with lower levels of migration between two countries (Lewer & Van den Berg,

2008), likely because the larger distance is related to higher costs of migration (e.g., owing to travel and moving expenses).

Trade with the United States: This variable refers to the mean end-of-year product trade (imports plus exports) between the United States and the foreign country, limited to the years 2000–2016, as reported by the Census Bureau. Trade has been linked to migration between trading countries (Felbermayr & Toubal, 2012; Sangita, 2013).

Institutional Quality: This variable is the average of the six World Bank's Worldwide Governance Indicators (WGI)—Voice and Accountability, Political Stability and Absence of Violence, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption—averaged across the years 1996–2016. This variable serves two purposes: First, research has found that institutional quality, and particularly the degree of political stability, is a determinant of net migration to countries (Ziesemer, 2010). Countries with good institutional quality are expected to have higher numbers of U.S. citizens. Second, countries with low governance quality are also likely to have poor FGEs, because they are unlikely to invest in the human capital of their bureaucracy.

Number of Immigrants in the United States: This variable is the number of immigrants from a foreign country ages 25 and up in the United States in the year 2000 as reported by Artuc et al. (2013). One type of potential out-migrant from the United States is an immigrant from a foreign country (or his or her offspring) who then decides to return to his or her country of origin (Scheuren, 2012). A more general justification for the inclusion of this variable is that it may proxy for factors that promote or inhibit migration both to and from the United States, such as transportation costs. Consequently, countries with larger numbers of immigrants in the United States would be expected to have larger numbers of U.S. citizens. On the other hand, the number of immigrants in the United States from the country may also be negatively associated with the number of U.S. citizens in that country, if factors that affect migration flows asymmetrically (such as political instability) are salient. The uncertainty regarding relationship direction is not a limitation for this predictor because the estimation strategy does not require an assumption of a positive or negative relationship.

U.S. Military Aid: This variable refers to the total amount of military assistance in constant dollars made by the United States to the foreign country between 1946 and 2015 as reported by United States Agency for International Development (USAID). Aid to foreign countries by the U.S. Government, and the associated interaction between those governments, may promote migration from the United States to the foreign beneficiary countries by facilitating the transfer of information about the foreign country to potential U.S. migrants (Berthelemy, Beuran, & Maurel, 2009). In addition, aid may be a proxy for general diplomatic ties (Alesina & Dollar, 2000) associated with foreign government policies that are advantageous to U.S. migrants, leading to increased U.S. migration to the country.

English or Spanish: This is a variable regarding whether English or Spanish is spoken in the foreign country. The information is taken from *Ethnologue: Languages of the World* (Lewis, Grimes, Simons, & Huttar, 2009). These variables may proxy for cultural distance between the United States and the foreign country as well as for the ability to succeed in the host country's labor market (Adsera & Pytlikova, 2012). Given that English and Spanish are the two most widely spoken languages in the United States, countries where these languages are commonly spoken are expected to attract more U.S. citizens.

Trend: This is a linear trend variable that controls for trends in the size of the overseas U.S. citizen population common to all countries and not explained by other theoretical variables. It accounts for variation in factors that affect migration to all other countries, such as advances in communication technology, changes in transportation costs, or general geopolitical factors. These

factors may include population growth through births of U.S. citizens, whether overseas or within the United States, which would be expected to affect the total number of overseas U.S. citizens. In addition, this variable may also capture changes in transportation costs over the 2000–2016 period of study, which would also be expected to affect the tendency of U.S. citizens to migrate.

To impute data on exchange students, (log-linear) interpolation and extrapolation methods were used to determine values for missing years, as needed. Countries without a count for any year were assigned a value of zero.

For the SSA and IRS data, the FMG Team imputed the missing data for countries for which there were no data. For the SSA data, most years had very reliable administrative counts on the total number of beneficiaries from a region (e.g., Africa) and by country. To impute the number of beneficiaries for African countries without counts, the number of beneficiaries from those countries that had a country count from the SSA was subtracted from the region total. For example, if there were 10,000 beneficiaries for Africa, only South Africa was provided with a count, and 500 beneficiaries were listed from South Africa, 500 were subtracted from the 10,000 regional total. There would remain 9,500 beneficiaries to allocate to the countries without specific counts. To allocate the remaining beneficiaries, a model was created using the variables listed above.

The FMG Team used this model to generate predicted numbers for those countries without estimates and distributed the unassigned beneficiaries of a region in proportion to that prediction. For example, a highly populated African country where English is the primary language that has a relatively high GDP has more beneficiaries allocated to it compared to a highly populated French speaking country in Africa with a relatively low GDP. A similar methodology was employed to generate estimates for the number of IRS returns for those countries for which the IRS does not already provide estimates. Once all countries have an estimate for the years for which data are available, estimates for the remaining years are produced using (log-linear) interpolation or extrapolation.

The collected and imputed data yield the final set of variables that will be used to model the foreign country population estimates.

## Estimating the Overseas Citizen Population

Because of the complexity of migration, there is no clear indication of which variables—and which combination of variables—will be the most predictive, and there are too many possible combinations to include all of them. To address this uncertainty, a variant of a method called ensemble Bayesian model averaging (EBMA) was used. EBMA has been found to yield more accurate predictions than using a single model when predicting armed conflicts or the outcome of presidential campaigns (Montgomery et al., 2012). The general approach of EBMA is to take predictions from multiple models (i.e., ensembles) and create an average of all the estimates weighted by the model's fit to the data in combination with each model's correlation or redundancy with predictions derived from other models. The resulting estimate is designed to be more accurate than the estimates derived from any single model by minimizing the effects of overfitting the data resulting from individual model specifications. At the same time, this method allows the final estimate to incorporate as much information as possible from the predictor variables.

## Dual Citizens

*One critical issue that needed to be addressed in this model was the handling of dual citizens. Many countries encourage dual citizenship as a way to promote continued engagement with their expatriate populations (Lafleur, 2012). These policies may therefore promote return migration, reflected in a larger FGE. Therefore, including DUAL in the model, and allowing predictions to vary with DUAL, is important in the present circumstance because whether a country allows dual citizenship with the United States may have an effect on the size of the U.S. citizen population given that the prospect of gaining citizenship in the host country while retaining U.S. citizenship may encourage immigration to that country. In addition, DUAL may proxy for unobserved policies that encourage U.S. citizen migration as well as historical connections with the United States.*

The data collected, along with the data imputations, yield the final set of variables that will be used to model the foreign country population estimates. As noted above, FGEs are only available for some countries for some years, and counts of demographic subgroups are available for even fewer countries and years. In addition, some countries with complete data—foreign government data on Americans in their country, U.S. administrative data, and all other variables—will still have errors in their FGEs because of the issues associated with registries, censuses, and other factors. Therefore, the Team ran models to generate FGEs for all countries: those with complete data including FGEs and those without an FGEs.

Several possible models and approaches can be used to develop this type of estimate. These models differ both in the underlying mathematical algorithms and in the choice of variables used to create the predictions. In an effective predictive model, the outcome variable (in this case, the population of U.S. citizens) is related to the predictor variables in a systematic way. Because the FGE is strictly positive and bounded from below at 0, each model was estimated using a Poisson regression. The Team ran this model for every combination of predictor variables and then derived an average prediction.

The *N* models take the form:

$$\mathrm{FGE}_{it}^{m} = e^{\beta C_{it} + \beta X_{it}^{m} + \gamma 1 \mathrm{REGISTRY}_{it} + \gamma 2 \mathrm{CITIZEN}_{it} + \gamma 3 \mathrm{DUAL}_{it} + \gamma 4 (\mathrm{DUAL}_{it} * \mathrm{CITIZEN}_{it}) + constant}$$

In this model,

- *FGE* is the foreign government estimate of the size of the U.S. citizen population in country *i* in year *t* (i.e., there is at most one estimate for every country-year for the period 2000 to 2016).

- *C* is a vector of variables reflecting the (natural log of the) size of particular subpopulations of the U.S. citizen population and is thus highly likely to be correlated with the FGE. For this reason, these variables are included in every model. In these models, these variables are all of the U.S. Government administrative data for each country for each year.

- *X* is a vector of predictor variables that are likely to explain variations in the U.S. citizen population of country *i* included in model *m*. These include the mobility variables described in the previous section. Because it is unknown which, if any, of the mobility variables improve model fit most effectively over a model with just subpopulation counts, models were run for every combination of mobility variables (including one specification with no such variables).

- *REGISTRY* is a variable that takes a value of 1 if the

country's FGE is based on a registry count, and 0 otherwise.

- *CITIZEN* is a dummy variable that takes a value of 1 if the FGE pertains to the number of U.S. citizens in the country, and 0 otherwise.

- *DUAL* is a dummy variable that takes a value of 1 if the country allows dual citizenship with the United States, and 0 otherwise. [1]

- *DUAL * CITIZEN* is an interaction variable that takes a value of 1 if the country allows both dual citizenship and has an FGE that counts U.S citizens, and 0 otherwise.

The goal is to estimate the difference between the number of overseas U.S. citizens in countries that both allow dual citizenship and count the number of U.S. citizens, and countries that do not meet one or both of these conditions. Specifically, predictions are generated under the assumption that no country meets both of these conditions (i.e., DUAL*CITIZEN = 0) as it is under such circumstances that one is most likely to encounter citizenship misclassification and, thus, inaccurate citizen counts. In other words, citizenship-based FGEs for countries that allow dual citizenship are adjusted such that the prediction incorporates dual citizens. To generate these predictions, REGISTRY is assumed to equal 0, CITIZEN is assumed to equal 1, and (DUAL * CITIZEN) is assumed to equal 0 for all countries. The constraints applied to REGISTRY, CITIZEN, and the DUAL*CITIZEN product make the final predictions more comparable with respect to the population. To be specific, a count of U.S. citizens (i.e., CITIZEN = 1) is enumerated using a census (REGISTRY = 0).

### Averaging Across Models

Estimating the overseas U.S. citizen population was complicated because it was not clear which variables—and which combination of variables—should be used to model this population. To address this uncertainty, the FMG Team used EBMA, which has been found to yield more accurate predictions than using a single model when applied to predict armed conflict prediction or the outcome of presidential campaigns (Montgomery et al., 2012). The general approach of EBMA is to take predictions from multiple models (i.e., ensembles) and create an average of all the estimates weighted by the model's fit to the data in combination with each model's correlation or redundancy with predictions derived from other models. The resulting estimate is designed to be more accurate than the estimates derived from any single model by minimizing the effects of overfitting the data resulting from individual model specifications. At the same time, this method allows the final estimate to incorporate as much information as possible from the predictor variables.

#### *Models*

For the estimates of the overseas U.S. citizen population, the baseline model includes (1) all U.S. Government administrative data, (2) data about whether a country has a registry or census, (3) how that country counts a U.S. citizen, and (4) if the country allows dual U.S. citizenship. Additional models that include every combination of the migration research variables are also estimated.

The model space from which this average prediction is derived takes the form of all possible

1 "Dual Citizenship" in this case means individuals can be citizens both of the country and the United States. Consequently, this variable is also coded as 1 for countries with that allow for citizenship for more than those two countries.

combinations of predictor variables. For *k* predictors, the number of models, *N*, equals 2^ (*k*) (including the model with no theoretical predictors, as described above). As applied to the estimation of overseas U.S. citizens, this approach is not likelihood-based (instead, it is based on root mean square error; see below) and, therefore, is not Bayesian. Consequently, the modeling approach is simply referred to as ensemble model averaging (EMA).

The final estimate of the overseas U.S. citizen population for country *i* in year *t* is:

$$\exp(P_{it}) = \exp(\sum_{m=1}^{N} w^m P_{it}^m)$$

or the anti-log of the average of all linear predictions for the country across *N* models, weighted by model validation metric *w*.

The model validation metric *w* can be expressed in reduced form as:

$$w^m = \frac{f^m * c^m}{\sum_{m=1}^{N} f^m * c^m}$$

In which $f^m$ is the component of the metric that indicates how well model *m* fit the data. $f^m$ can be written as:

$$f^m = \frac{(\frac{1}{MSE^m})}{\sum_{m=1}^{N}(\frac{1}{MSE^m})}$$

in which the MSE is the mean squared error. The MSE is determined through *K*-fold cross-validation (Stone, 1977); each observation in the sample is randomly assigned to one of *K* subsamples, the model is estimated using the *K* – 1 subsamples, predictions are produced for the excluded validation sample, and the MSE (weighted by the selection bias weight α_i, from above) is generated for that subsample. The cross-validation procedure is repeated *K* times, with each subsample acting as the validation sample in turn. The cross-validation step is then repeated *S* times, with the average of the *S* * *K* MSEs used as the model MSE. In this application, it set *K* = 5 and *S* = 10.

### *Overfitting and In-Sample Data*

Overfitting often occurs when a model is made overly complex so that the results best fit the data being used for estimation (the "in-sample" data). This overfitting can affect the quality of the forecasting and prediction. The approach used here, helps alleviate concerns about model overfitting by using model averaging and cross-validation.

Each model's contribution to the final estimate is therefore determined by its out-of-sample predictive ability, minimizing overfitting that could result from determining model performance based only on in-sample fit. Testing the model using countries that were not used to build the model allows for a more robust test as its predictive power is more likely due to variation in the U.S. citizen populations in these countries and not random measurement error (Hawkins, 2004; Ward, Greenhill, & Bakke, 2010).

The other component of the model validation metric, $c^m$, captures the degree to which the predictions generated by a model are correlated with predictions generated by other models. Specifically:

$$c^m = \frac{1/\sum_{j=1}^{N-1} \mathrm{Corr}\left(P^m, P^j\right)}{\sum_{m=1}^{N}\left(1/\sum_{j=1}^{N-1} \mathrm{Corr}\left(P^m, P^j\right)\right)}$$

in which Corr is the correlation coefficient between models *m* and *j*. In other words, $c^m$ is larger when a model is relatively uncorrelated with other models. The model validation metric $w^m$ is larger when models simultaneously (1) make relatively accurate out-of-sample predictions, and (2) are uncorrelated or not redundant with predictions made from other models. The validation metric, therefore, focuses on the models that are best at prediction, while also being sure to include a diverse set of model specifications rather than just minor variations of the same model. The proposed validation metric thus rewards accuracy and penalizes redundancy.

### Mitigating Selection Bias

One potential issue with the modeling strategy outlined so far is that countries for which FGEs are available may be different than those where FGEs are not available. In particular, countries without FGEs tend to be poorly governed and tend to have relatively low economic output.

To account for this potential selection bias that may result from countries with FGEs being different in ways that may also affect the size of their overseas U.S. population, each country is given a weight for the purpose of model estimation:

$$\alpha_i = \frac{1}{\Pr(\mathrm{FGE})_i * n_i}$$

in which Pr(FGE) is the predicted probability that a country has an FGE during the years 2000 through 2014 based on its observable characteristics and *n* is the number of years for which country *i* has an FGE. The predicted probability of having an FGE is generated using a logit regression in which the sample is all countries for which predictions are made. Predictor variables include all variables in vectors *C* and *X* in the estimation equation along with U.S. State Department region dummy variables. Data for the predictor variables for this selection equation were obtained for the year 2000. The result of the weighting is that countries with FGEs that have a low probability of having an estimate (based on the selection bias equation) have more weight when generating model parameters and predictions, resulting in more accurate EMA predictions for countries without estimates, and more accurate parameter estimates than those that would be generated in an unweighted model. This mitigates selection bias when there is not an unobserved factor (i.e., one not included in the model) that affects both the size of the FGE and whether a country has an FGE (Wooldridge, 2002). Including *n* in the denominator of the weight accounts for the overrepresentation of some countries in the sample because of their having FGEs for multiple years.

## Estimating the Eligible Voter Population

To estimate the number of U.S. overseas citizens who are eligible to vote, the modeled estimates needed to be filtered to those 18 years and older. The FMG Team started the estimation process by using data from the Database on Immigrants in OECD Countries (DIOC). This data set provides counts of international migrants 15 years of age and older in OECD and some non-OECD countries by country of origin, divided into demographic groups defined by age, education, and gender. There are three age categories (15–24, 25–64, 65 and older), three education categories (No Education/Primary Education, Secondary Education, Post-Secondary Education), and two gender categories, for a total of 18 demographic groups. The population of U.S. citizens under the age of 15 was estimated for a subset of the DIOC country-years by subtracting the total population aged 15 and older from an available FGE to get the population under age 15, resulting in a total of 19 demographic groups encompassing the entire U.S. citizen population in a country.

However, the DIOC has not released new estimates since 2014, so the FMG Team collected additional estimates from the Minnesota Population Center's Integrated Public Use Microdata Series (IPUMS) International data. The IPUMS International website organizes census microdata from countries across the world; these data were collected and aggregated to mirror the same population categories as the DIOC data. In cases in which data were available from both the DIOC and IPUMS for a given country-year, the IPUMS data were used. Unlike the DIOC data, the under age 15 population were available in the IPUMS data and did not require imputation.

The model-averaging methodology was used to obtain predictions for both the aggregate population as well as the sizes of each age-gender-education group for all countries in the frame

for the years 1996 to 2016. The size of each stratum was then rescaled so that the total number of U.S. citizens in each country across all groups was equal to the total number of U.S. citizens in each country as estimated in the updated 1996–2016 populations. In practice, after allocating the population across groups for each country, the under age 15 group was removed first, as was a proportion of the age 15–24 group who are under age 18. This was done by removing a proportion of those who do not have a high school education, equivalent to the proportion of the relevant domestic U.S. population who are age 15–17. The estimated counts by demographic strata were then used to obtain an estimate of the size of the eligible population. This ultimately resulted in an estimate of the number of voting-eligible U.S. citizens residing in each country from the years 1996 to 2016.

# ESTIMATION METHODOLOGICAL CHANGES AND VALIDATION

## Collected Data Validation

As discussed in the previous section, the data sets used as predictors in the initial iteration of the analysis were updated by collecting newly released data, and in the case of the demographic data from the DIOC, additional data from IPUMS were collected. Because changes to these data sets directly affect the resulting estimates, it is crucial to understand the ways in which they differ and to confirm that the changes are an improvement over the original data. Of these data sets, there were three types of changes: (1) newly released data, (2) methodological changes, and (3) the inclusion of data from a separate source.

Of the 13 sources of data used as predictors of the number of U.S. overseas citizens, eight had updates available, two of which had made substantial methodological changes that necessitated more detailed validation (see Table 1). This section evaluates the changes in the eight updated data sets by checking their correlations to the original data and looking for outliers. Overall, the changes to the data sets were either just an increase in coverage, or were changes in the preexisting data that are an improvement over the data used for the 2014 analysis that are expected to improve the precision of the analysis.

**Table 2.1: Summary of Updates to Data**

| Variables | Source | Updates Available | Methodological Changes |
|---|---|---|---|
| **Federal Government Employees** | Office of Personnel Management | Yes | None |
| **Students Abroad** | Institute of International Education | Yes | None |
| **Social Security Beneficiaries** | Social Security | Yes | None |
| **World Governance Indicators** | World Bank | Yes | None |
| **Trade** | U.S. Census Bureau | Yes | None |
| **Population, GDP per Capita** | Penn World Tables | Yes | GDP per capita no longer reported, expenditure side GDP used instead |
| **Military Aid by U.S.** | U.S. Agency for International Development | Yes | Categorization of military aid spending changed |
| **U.S.-Born Population Demographics** | DIOC and IPUMS | Yes | IPUMS data collected to supplement existing DIOC data |

| Table 2.1: Summary of Updates to Data | | | |
|---|---|---|---|
| Variables | Source | Updates Available | Methodological Changes |
| **Population by Age, Gender, and Education** | DIOC | No | None |
| **IRS Form 2555s** | IRS Statistics of Income | No | None |
| **Distance** | United Nations World Urbanization Prospects | No | None |
| **Language Spoken** | Ethnologue: Languages of the World | No | None |
| **Immigrants in the U.S.** | Artuc et all (2013) | No | None |

## Newly Released Data

For the five sources that had updated data and no methodological changes, several validation steps were taken to confirm that data for preexisting country-years had not changed dramatically, and that data for new country-years were in line with what was previously available.

First, for each data set, the correlation was calculated for country-years that existed in both the original and updated data, and the two were plotted against each other to check for outliers. For OPM, students, and Social Security beneficiaries (SS), there were no changes to the data from preexisting years. The trade and WGI had some changes, but the correlation for all fields was greater than 0.99. The trade data had no outliers, and while WGI had some, the biggest outliers were countries such as South Sudan, West Bank/Gaza, and Syria, where it is reasonable for changes in political stability to have been measured in the past couple of years.

Additionally, the yearly averages of each field from the five data sets were plotted to confirm that the data for newly collected years followed the same trend as the preexisting data. None of the data sets saw any sharp increases or drops in the averages for the new years. Overall, although there were several outliers and changes to the data, all of them can be explained by changes in the political climate of the country over the last two years.

## Methodological Changes

The Penn World Tables (PWT) were the source used for data on both a country's population and economy. Version 7.1 was used for the analysis conducted for the 2014 election, and Version 9.0 was used for the 2016 election analysis. Between the two versions, PWT stopped reporting Purchasing Power Parity (PPP)-converted GDP per capita (RGDPCH), which was originally used as a measure of a country's economy and started reporting expenditure-side real GDP (RGDPE) instead.

Although overall the RGDPCH and RGDPE only had a correlation of 0.24, the average correlation between the two for a given country was 0.78. This indicates that although the relationship between the two varies by country, the trends over time within a given country are generally positively correlated. Because the two metrics of economic conditions are not perfect proxies for each other, the relationship with the U.S. overseas population may be different for RGDPE and

RGDPCH. However, because expenditure-side GDP more closely mirrors the metric used to show the association between economic conditions and migration, using RGDPE instead of RGDPCH is expected to improve the model performance.

Although not as substantive as the change from RGDPCH to RGDPE, PWT also made some changes to the population estimates that are worth highlighting. In addition to adding in estimates for 2011 through 2014, all preexisting observations had some changes to their population. Although the difference between PWT 7.1 and 9.0 estimates was within 5% of the original version 7.1 estimate for 80% of country-years and the correlation between the two was 0.99, some changes as much as doubled the population estimate. It is also worth noting that for 2010, the most recent year available in both data sets, the total population was 1% higher in version 9.0 than 7.1 among countries that appear in both.

Since the last round of the analysis, USAID expanded its data offerings to include more kinds of transactions and added categorical subdivisions within a given country-year, such as the funding agency. Due to these changes, it was impossible to aggregate the newly collected data set to exactly replicate the country-year amounts from the previous analysis, but limiting the transactions that were flagged as "military" and excluding the ones flagged as "economic" got relatively close, resulting in a correlation of 0.998 between the old and new versions of the data set.

Despite the high correlation, it is still worth highlighting the differences between the two versions of the data sets. In order to reduce the variance in the data, the military aid totals were summed for all years available. For 22 countries, the average in the updated data set was more than twice what it was originally. In particular, the average U.S. military aid in Syria increased from $352,000 a year to $95 million.

As with Syria, many of these are countries where the United States is actively involved, so it is sensible to see an increase in U.S. aid. It also highlights that although averaging military aid across all years available is intended to reduce noise, it is also susceptible to changes in U.S. international involvement and can result in dramatic changes in the value during years the United States was not actively involved.

## New Data Sources

As highlighted in the previous section, the DIOC data are crucial in deriving the eligible voter population from the estimate of the total number of U.S. citizens, and data from IPUMS had to be collected to supplement the DIOC data because no updates had been released since the data were originally collected for the 2014 analysis. Because of the vital role of these data sets in this analysis, and because this is the only instance in which data from two different sources are combined—rather than just replacing one data set with another—it is of particular importance to validate them both and to evaluate how similar they are. Having both data sets increases the coverage, but it can also introduce bias if they are systematically different.

The demographic subpopulation data from IPUMS and DIOC were validated by comparing the values in each of the demographic strata for 123 country-years with both DIOC and IPUMs data, as well as by comparing the strata totals to the collected FGEs. Although the IPUMs population counts were within 75% to 165% of the DIOC value for 80% of overlapping country-years, there were some observations with much larger differences. Most notably, the total U.S.-born population estimate for Spain in 2011 dropped from 300,000 in the DIOC data to just under 29,000 in the IPUMS data. However, the FGE collected for Spain in that year was 28,000. Excluding Spain in 2011, the DIOC population estimates were higher than the FGEs by 7,835 people, compared to 4,794 in the IPUMS data. Although the population totals are not used in the estimation of the eligible voter population—only the subpopulation demographic proportions—the relative similarity of the IPUMS

counts to the FGEs indicates that it is a more accurate metric of the overseas U.S. citizen population than the DIOC data.

Within the strata, the number of U.S.-born individuals under 15 years of age warrants special attention. It has the most direct impact on the estimate of the proportion over 18 years of age, and therefore the eligible voter population, so it is important to understand the changes the IPUMS data introduced to this metric in particular. Not all countries track that age bin, so only 22 of 87 country-years with DIOC data had estimates of the under-15 population available. For the 65 country-years with DIOC data, the age under 15 was imputed when it was not available. The low coverage in the DIOC data left only six country-years with an estimate in both data sets, so it is not meaningful to compare the DIOC and IPUMS values for those observations to draw conclusions about the validity of the two data sets.

Instead, comparisons were drawn using the imputed under-15 population from the original analysis and updated analysis. The resulting population estimates were very similar, with a correlation of 0.99. With a correlation of 0.86, the estimates varied more as a proportion of the estimated U.S. citizen population, and declined by an average of 14 percentage points. In other words, the inclusion of the IPUMS data resulted in a lower estimate of the proportion of U.S. citizens living overseas who are under the age of 15. This, coupled with the increase in the estimated overseas U.S. citizen population discussed in the following section, ultimately led to an average increase in the estimated eligible voter population from 11,436 per country-year to 13,273, or 16%.

Because of the increased coverage from combining the IPUMS data with the DIOC data, the methodological improvements in the IPUMS data compared to the DIOC data, and the relative similarity of the IPUMS data to the FGEs, it is evident that including the IPUMS data in the analysis was an improvement over the original analysis. Therefore, although this section demonstrated the effect the IPUMS data had on the eligible voter estimates, the changes reflect an increase in accuracy of the estimates.

## Estimates Validation

For the overseas citizen population estimates, two validation tests were conducted. First, the FVAP estimates were compared to the estimates generated in 2015. Second, the FVAP estimates were compared to estimates produced by the World Bank. Together, these tests helped determine whether the estimated geographic distribution of the overseas citizen population was reasonable.

If the FGEs used to generate the FVAP estimates were subject to substantial measurement error, then the estimates themselves would be less accurate due to overfitting. This measurement error would be unlikely to be correlated with the predictors in a way consistent with theory.

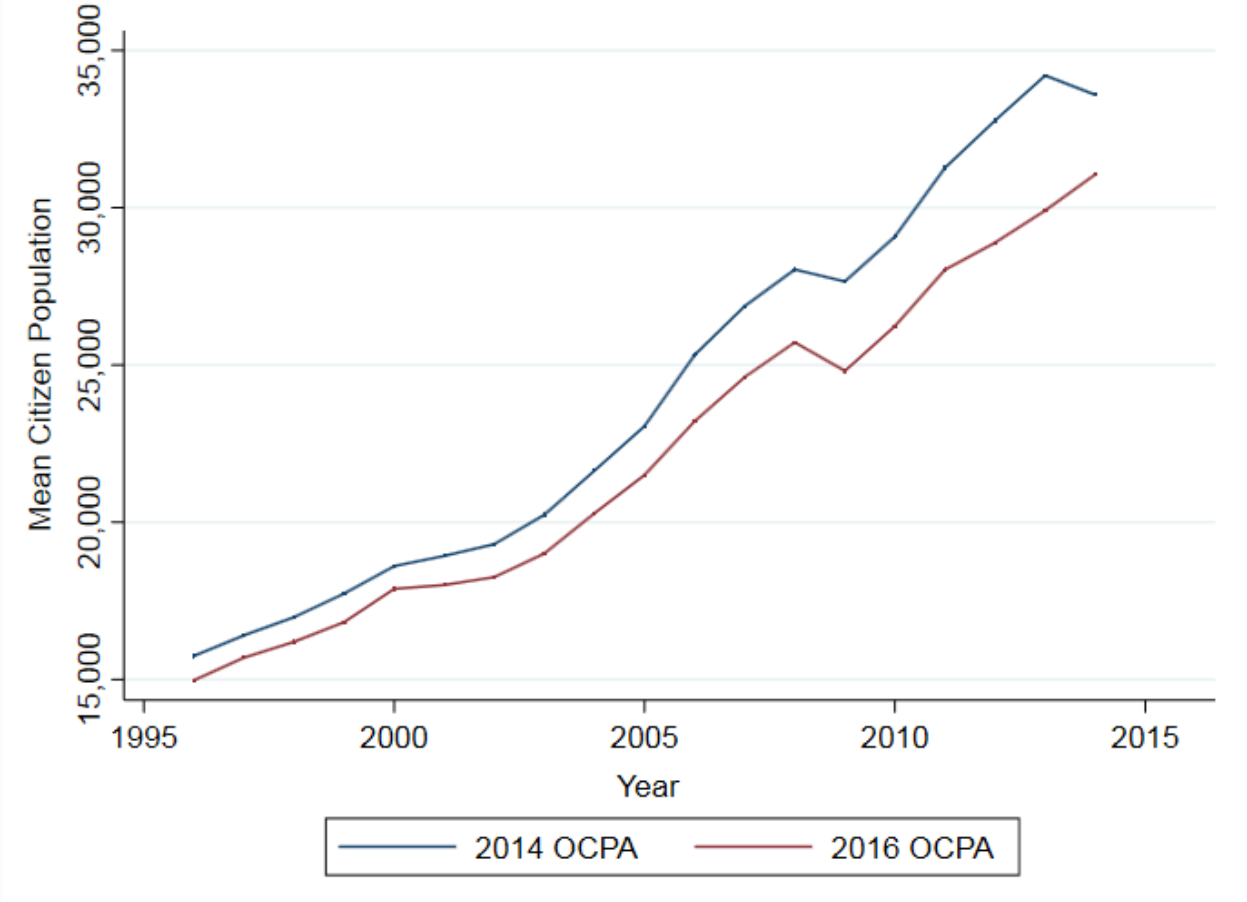
### Testing Against Previous FVAP Estimates

The first way the new set of estimates was validated was by comparing them to the estimates produced in 2015. Because, as demonstrated in the data validation section, the changes to the predictor data were minimal, it follows that the resulting estimates should still be highly correlated with the previous set of estimates, thus demonstrating that both models are predictive. If the models were not performing well, then the unexplained variance would result in a low correlation between the estimates. In this section, the new overseas U.S. citizen population and eligible voter population estimates are compared to the 2015 estimates by calculating the correlations, comparing the global averages over time, and evaluating the changes to the estimates for overlapping years.

Overall, the changes to the U.S. citizen population estimates were minor. The new estimates had a

correlation greater than 0.99, and the ratio between the two estimates was approximately 1 on average. However, countries with larger U.S. populations were more likely to see a decrease in their new estimates, resulting in an overall decrease in the estimated U.S. overseas citizen population. Figure 2.1 below shows the average estimated U.S. citizen population by country over time for both the old and new estimates. Although the new estimates are consistently lower on average, the two sets of estimates follow the same trend year over year, and the new estimates continue the trend for 2015 and 2016, which previously had no estimates.

Figure 2.1. Average U.S. Citizen Population by Country Over Time




As the table below demonstrates, the countries with the biggest proportional changes in their U.S. citizen population estimates were the ones with especially low populations. This is to be expected, as a change in the estimate of just a couple dozen people can have a dramatic effect on the proportion for small countries. Additionally, less administrative data are generally available for smaller countries compared to larger ones. Although imputation was used to fill in the gaps, imputation is still less accurate than measured data, and thus introduces additional variance.

| Table 2.2: Top Percentage Changes in FVAP Overseas Citizen Population Estimates | | | | | | | |
|---|---|---|---|---|---|---|---|
| Top Increases in U.S. Citizen Estimates | | | | Top Decreases in U.S. Citizen Estimates | | | |
| Country | Year | New Estimate | Percent Change | Country | Year | New Estimate | Percent Change |
| Ethiopia | 1996 | 421 | 618% | Ethiopia | 2003 | 333 | -80% |
| Belarus | 2014 | 825 | 476% | Cote d'Ivoire | 2014 | 3368 | -76% |
| Belarus | 2013 | 798 | 236% | Guinea-Bissau | 2014 | 40 | -75% |
| Azerbaijan | 2014 | 2612 | 223% | Togo | 2014 | 1353 | -72% |
| Macao | 2014 | 1415 | 219% | Burundi | 2014 | 120 | -72% |
| St. Vincent | 2014 | 462 | 207% | Liberia | 2014 | 758 | -72% |
| Laos | 2014 | 827 | 198% | Mali | 2014 | 212 | -71% |
| Belarus | 2012 | 1113 | 183% | Sierra Leone | 2014 | 536 | -69% |
| Montenegro | 2014 | 286 | 167% | Burundi | 2013 | 125 | -68% |

By contrast, Table 2.3 shows that the countries with some of the largest U.S. citizen populations are the ones that saw the biggest changes in their estimates in terms of raw counts. Mexico, Italy, and the Dominican Republic all saw large increases in their estimates for multiple years, whereas the estimates declined for the U.K. and Canada in recent years.

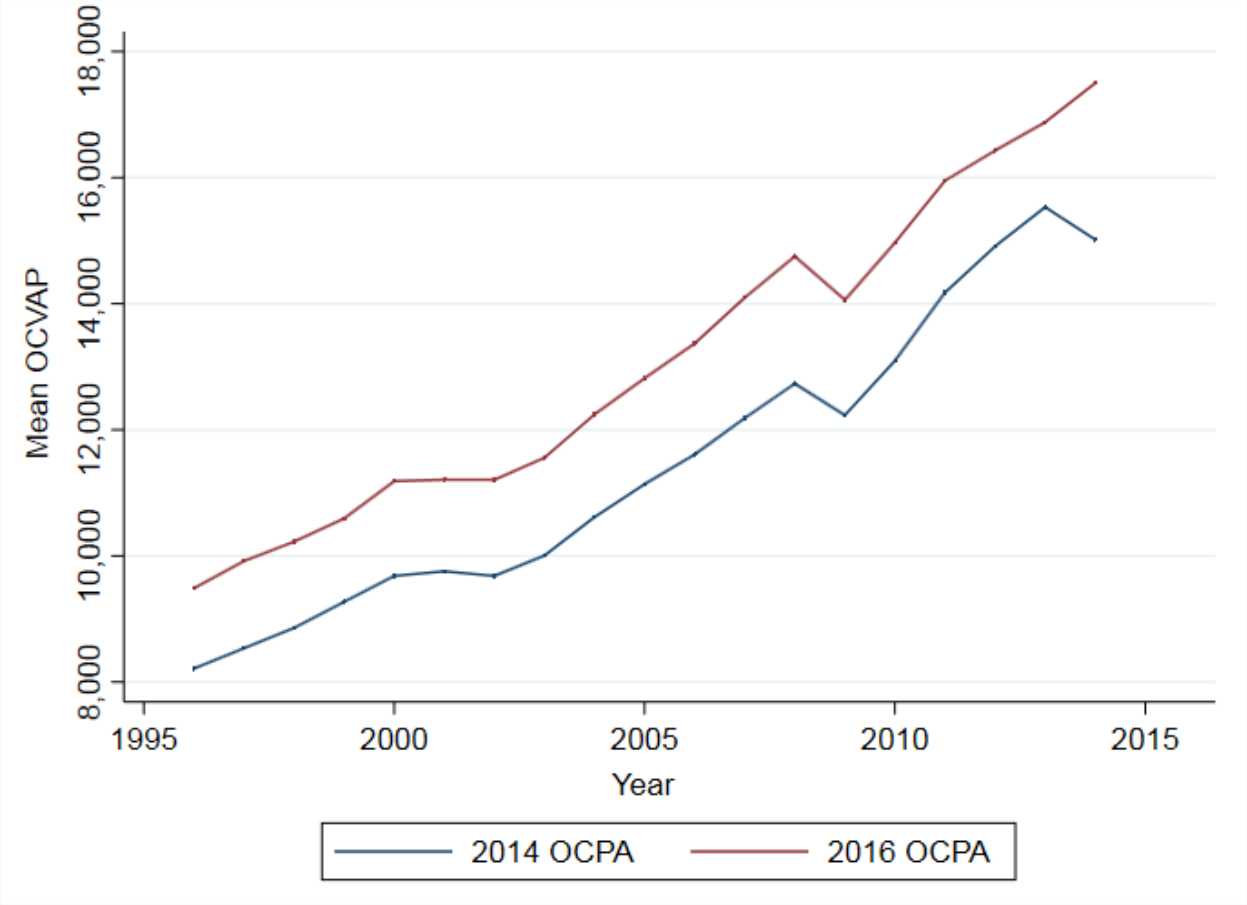
| Table 2.3: Top Overall Changes in FVAP Overseas Citizen Population Estimates | | | | | | | |
|---|---|---|---|---|---|---|---|
| Top Increases in U.S. Citizen Estimates | | | | Top Decreases in U.S. Citizen Estimates | | | |
| Country | Year | New Estimate | Change | Country | Year | New Estimate | Change |
| Mexico | 2014 | 1,026,477 | 108,410 | Canada | 2013 | 726,931 | -204,585 |
| Dominican Republic | 2014 | 74,922 | 14,245 | Canada | 2014 | 762,263 | -181,299 |
| Italy | 2014 | 87,432 | 13,953 | Canada | 2012 | 695,493 | -165,566 |
| Italy | 2000 | 58,876 | 12,330 | Canada | 2011 | 686,444 | -108,089 |
| Italy | 1996 | 50,855 | 12,209 | U.K. | 2013 | 395,425 | -107,538 |
| Italy | 1997 | 52,355 | 12,070 | U.K. | 2012 | 396,716 | -101,021 |
| Italy | 1999 | 56,171 | 11,891 | U.K. | 2011 | 385,235 | -94,129 |
| Italy | 1998 | 53,963 | 11,862 | U.K. | 2010 | 367,086 | -88,819 |
| Italy | 2001 | 58,824 | 11,762 | Canada | 2010 | 631,753 | -85,837 |
| Italy | 2002 | 61,114 | 11,600 | U.K. | 2009 | 354,738 | -85,542 |

Despite the examples above, with a correlation of 0.99, the newly generated estimates followed closely with the estimates produced in 2015. Because the changes to the predictor data sets were determined to be an improvement of the predictor data used in the previous iteration, the differences in the estimates of the overseas U.S. citizen population can be viewed as an increase in precision over the original estimates.

Because of the updates to the U.S. citizens subpopulations discussed in the data validation section, the changes to the eligible voter population were more substantial, although the old and new estimates still had a correlation of 0.98. Because of the addition of the IPUMS data to the DIOC data on overseas U.S. citizens demographic subpopulations, the average estimate of the percentage of U.S. citizens over 18 years of age increased by an average of 12 percentage points, resulting in eligible voter estimates that were on average 1.8 times what they were in the 2015 estimates.

Similar to the U.S. citizen estimates, the plot below shows that, despite the changes in the estimate of the proportion eligible, the new eligible voter estimates follow the same trend year over year as the original estimates, and continue the trend into 2015 and 2016.

Figure 2.2. Average Eligible Voter Population by Country Over Time




As with the U.S. citizens updates, although the biggest country-years shifts in the eligible voter estimates may appear to be drastic, they are all for countries with small U.S. citizen populations. In this case, nearly all have fewer than 1,000 estimated eligible voters, meaning they have a very minimal impact on the overall eligible population estimates.

| Table 2.4: Top Overall Changes in FVAP Eligible Voter Estimates | | | | | | | |
|---|---|---|---|---|---|---|---|
| Top Increases in Eligible Voter Estimates | | | | Top Decreases in Eligible Voter Estimates | | | |
| Country | Year | New Estimate | Percent Change | Country | Year | New Estimate | Percent Change |
| Ethiopia | 1996 | 96 | 15,433% | Liberia | 1996 | 60 | -82% |
| Iran | 1996 | 26 | 7,643% | Liberia | 2014 | 285 | -79% |
| Iran | 1997 | 45 | 6,039% | Liberia | 1997 | 52 | -75% |
| Iran | 1998 | 48 | 5,608% | Liberia | 2013 | 302 | -75% |
| Iran | 1999 | 284 | 3,746% | Liberia | 2012 | 294 | -73% |
| Iran | 2000 | 621 | 2,925% | Togo | 2014 | 427 | -73% |
| Iran | 2014 | 982 | 2,888% | Togo | 2013 | 435 | -72% |
| Iran | 2001 | 777 | 2,436% | Mozambique | 2014 | 292 | -72% |
| Iran | 2002 | 910 | 2,171% | Liberia | 2011 | 259 | -72% |
| Iran | 2003 | 1082 | 2,160% | Togo | 2012 | 337 | -70% |

Being one of the countries with the largest U.S. citizen population, it is unsurprising to see Mexico at the top of the list of country-years with the greatest overall increases in the eligible voter population, although it is noteworthy that it is the sole country to appear (Table 2.5). Similarly, Canada and the U.K. consistently had some of the largest decreases in the eligible voter population between the 2015 and updated estimates, although this time they are joined by Costa Rica and Switzerland.

| Table 2.5: Top Overall Changes in FVAP Eligible Voter Estimates | | | | | | | |
|---|---|---|---|---|---|---|---|
| Top Increases in U.S. Citizen Estimates | | | | Top Decreases in U.S. Citizen Estimates | | | |
| Country | Year | New Estimate | Change | Country | Year | New Estimate | Change |
| Mexico | 2014 | 205,977 | 141,125 | Canada | 2013 | 577,275 | -82,873 |
| Mexico | 2013 | 199,721 | 125,552 | Canada | 2012 | 552,820 | -55,767 |
| Mexico | 2012 | 193,591 | 117,764 | Canada | 2014 | 605,704 | -55,231 |
| Mexico | 2000 | 206,611 | 116,555 | U.K. | 2001 | 270,698 | -32,945 |
| Mexico | 2011 | 190,460 | 113,583 | Costa Rica | 2013 | 55,871 | -30,070 |
| Mexico | 2007 | 193,116 | 112,870 | U.K. | 2000 | 265,214 | -29,897 |
| Mexico | 2006 | 194,779 | 112,365 | U.K. | 2002 | 263,893 | -27,873 |
| Mexico | 2008 | 189,386 | 112,317 | Costa Rica | 2012 | 56,607 | -27,396 |
| Mexico | 2001 | 195,773 | 111,367 | Costa Rica | 2014 | 52987 | -26,482 |
| Mexico | 2002 | 193,685 | 109,630 | Switzerland | 2012 | 45,679 | -25,827 |

The updates to the IPUMS and DIOC data resulted in higher estimates of the proportion of U.S. citizens who are over 18, which caused an increase in the estimated number of eligible voters—although Canada and the U.K. serve as an example that this was not the case for every country. Despite these changes from the 2015 estimates, because the IPUMS data are more reliable than the DIOC data, and because including both sets doubled the number of country-years the data on demographic subpopulations were available for, these changes are indicative of a more accurate

estimate of the number of eligible voters living overseas.

### Testing Against World Bank and State Department Data

The second validity test compares these estimates with those produced by the World Bank, which uses a different methodology. The differences in estimation methodologies may yield somewhat different results. Because the World Bank methodology does not account for differences across countries in who is counted as migrants from the United States and how they are counted, there could be a significant undercount of U.S. citizens in cases in which the country allows individuals to hold dual citizenship. For countries that do not update their estimates frequently (something more likely to occur in less developed, poorly governed countries), the 2013 World Bank estimates may have a lower estimate.

The way in which the World Bank imputes estimates for countries without an FGE may have implications for the size and geographic distribution of the U.S. population. The estimates produced here are expected to be larger relative to the World Bank estimates in regions with historically small numbers of U.S. citizens.

Table 2.6 compares the FVAP estimates with the World Bank estimates and the number of consulate registrations by U.S. citizens in 2013 as reported by the Department of State. The total size of the overseas citizen population is approximately two times larger according to the FVAP estimates than the World Bank estimates. The relatively larger FVAP estimates are consistent with the expectation that the World Bank estimates would undercount overseas citizens. The FVAP estimates are also closer in total size to the number of consulate registrations by U.S. citizens in 2013 as reported by the Department of State. However, when comparing the implied shares of the overseas citizen population residing in a given region, there is much greater agreement between FVAP and World Bank estimates. The FVAP estimates are closer in size to the Department of State estimates but closer in distribution to the World Bank's, suggesting that the estimation technique used here is addressing both undercounting problems that exist in the World Bank model but also overestimation possibilities in the Department of State's counts.

**Table 2.6: Overseas Citizen Population by Region in 2013**

| Region | Updated FVAP Estimate | World Bank | State Department |
|---|---|---|---|
| Africa | 111,235 | 48,685 | 197,986 |
| East Asia and Pacific | 826,401 | 453,145 | 1,089,897 |
| Europe and Eurasia | 1,357,609 | 785,556 | 1,622,226 |
| Near East | 234,208 | 159,153 | 989,428 |
| South and Central Asia | 115,462 | 48,641 | 285,745 |
| Western Hemisphere | 2,440,451 | 1,422,111 | 3,307,895 |

# SURVEY SAMPLING FOR THE OVERSEAS CITIZEN POPULATION SURVEY

The Overseas Citizen Population Survey (OCPS) is conducted as a part of FVAP's analysis of the overseas citizen population and is distributed to overseas citizens who requested an absentee ballot for the 2016 General Election. The OCPS asks respondents about their experiences leading up to and during the 2016 General Election, including items on their length of time living outside the U.S., the process for requesting and receiving their ballot, their use of special voting forms like the FPCA and FWAB, and demographic information. By themselves, these survey data provide a snapshot of who overseas voters are and how they navigate the voting process. Data from the OCPS are used in conjunction with broader population-level estimates to better understand how policies that provide special voting protections to overseas citizens affect their ability to vote.

## Target Population

The target population for the OCPS was U.S. citizens who were registered to vote on November 8, 2016; were residing outside the United States; were not Uniformed Services voters; and who requested an absentee ballot for the 2016 General Election that was sent to an overseas address.

## Absentee Voter Data Collection

Although the FMG Team has been able to estimate the size of the overseas citizen population by country and by region, there is no registry of overseas citizens that records where each of these individuals resides overseas.[2] However, there is a subpopulation of overseas citizens for which address information is often available: overseas citizens who have requested an absentee ballot. These data are not in a single database; instead, data on voter registration are held at the state or local level. For the current effort, the lack of a central repository of voter registration information meant that these data had to be collected from each state or local jurisdiction (as applicable) and combined in order to develop a comprehensive sampling frame.

This type of data collection can be especially cumbersome; fortunately, there are vendors with existing voter data infrastructure who create databases of domestic voters for use in national political campaigns. The effort of compiling a sampling frame required a custom data collection effort since it involved registered overseas voters rather than registered domestic voters. The FMG Team contracted with Aristotle, Inc., to carry out this effort because of its long history of providing high-quality data and political technology to a variety of campaigns, research groups, and advocacy organizations. Aristotle obtained the names and addresses of U.S. citizens voting from outside of the United States in the 2016 General Election. Specifically, the FMG Team constructed a file containing data for individuals who had made a *Uniformed and Overseas Citizens Absentee Voting Act* (*UOCAVA*) absentee ballot request as well as individuals who were registered at an overseas address in states that keep a permanent record of overseas addresses in their voter files. This variation in how the data were obtained by state (or locality) was necessary since states do not maintain and/or make available their voter data in a uniform fashion. For example, some states do not allow permanent registration from an overseas address, and states vary in their policies regarding how often they allow an overseas registration to last and how often they remove outdated addresses from their voter rolls.

The final data set of overseas citizens who requested an absentee ballot in 2016—referred to in this report as the absentee voter data—was compiled in the following manner:

1. Aristotle—which compiles state and local voter files into a nationwide voter file that

[2] U.S. citizens living or traveling overseas are advised, but not obligated, to register with the nearest U.S. Embassy or Consulate.

represents registered voters across all 50 states and the District of Columbia—searched its nationwide voter file using custom database queries for each state, county, and town (as applicable), for voter characteristics that suggested a person was a registered overseas voter in the 2016 General Election. Examples of these characteristics included being tagged as a *UOCAVA* voter in the file, having a non-standard state listing or ZIP code, or having an overseas address listed. These queries had to be applied separately for voter file records originating from different states or localities because of inconsistencies in how states, counties, and towns maintain their voter files. Based on these searches, a record was created for each registered overseas voter that included his or her name and overseas address, the demographic information contained in the state or local voter record, and the vote history for that overseas citizen, as available.

2. Some states do not keep a permanent *UOCAVA* voter tag or maintain the overseas address where a ballot was sent in their voter file, but instead keep this information in a separate absentee ballot request file. Other states tag their voter file for overseas citizen ballot requests as well as keep an absentee ballot request file. Still other states may not explicitly maintain such a file, but may be able to obtain information on overseas ballot requests via database queries. To ensure that the absentee voter data set was as complete as possible, a custom data collection effort was conducted, which involved contacting every state (and counties and municipalities as needed) to obtain a list of individuals in the state or local absentee file for voters asking for an absentee ballot from an overseas location for the 2016 General Election. For each record collected from the absentee ballot request file, information from the individual's state or local voter record was appended to these records (as available).

For states (or localities) that had both a voter file and absentee request file, these data sets were merged and de-duplicated to produce a single comprehensive file, with information retained on whether the voter was identified via a voter file, absentee request file, or both. The final dataset contained a voter's name, overseas address, domestic address, state of legal residence, vote history, key demographics (e.g., age, gender), and source of originating voter data (i.e., voter file, absentee requester list, or both). For purposes of this report, records that were identified via both types of records are classified as being identified via an absentee requester list, with remaining records classified as being identified via a voter file only.

For privacy reasons, the Minnesota Secretary of State did not provide Aristotle with names and addresses of overseas citizens who requested an absentee ballot. However, the office provided this information directly to FMG on behalf of FVAP, with restrictions on sharing this data or using the data for any purpose other than modeling and survey implementation. In the study, the key variables in the Minnesota data are consistent with those in the overseas absentee voter data gathered by Aristotle, except that vote history was only obtained for the last four election cycles (i.e., 2010, 2012, 2014, and 2016 Primaries and General Elections).

In obtaining absentee voter data, efforts were made to obtain absentee ballot requester lists from as many states and/or localities as possible. A key quality control effort that was implemented during the process of assembling the preliminary sampling frame entailed comparing record counts with Overseas Citizen Population Analysis (OCPS) 2014 frame record counts and Election Administration and Voting Survey (EAVS) 2014 and 2016 estimates of ballot transmissions to overseas voters by state and/or locality as a means of identifying jurisdictions where additional effort in obtaining records was merited. This process led to tangible improvements in frame coverage for several states. Additional post hoc data validation analyses were conducted subsequent to data collection and are described in Appendix B.

For many states, some of the voters represented in the data did not have an overseas address

listed, and the reasons for this were varied. Individuals without an overseas address were excluded from the final OCPS sampling frame, given that they could not be contacted via mail and, in most cases, could not be verified as overseas citizens. As a result, survey results cannot be generalized to this excluded portion of the sampling frame.

## Sampling Frame Overview

There are many ways to conduct a survey to understand the behaviors or attitudes of a given population. For small populations—such as 100 people working in an office—it may be possible to survey everyone. By surveying the entire population, inferences can be made about the behaviors or attitudes of the people in that population, since everyone is represented in the survey (assuming full survey participation). However, for larger populations, such as the population of registered overseas voters, given the cost and time constraints, it is typically necessary to survey a subset of people and have those people represent the larger population. The mechanism for selecting survey invitees is known as sampling, and it typically entails a random process in which every individual has a known probability of being selected into the survey. The conduct of such a sample survey starts with the identification of a sampling frame.

The sampling frame is the basis for inference in surveys; generalizations can only be made to the sampled population (i.e., individuals who have a chance of being selected for the survey). Although survey efforts typically wish to learn about a certain group of individuals, known as the target population, there are sometimes differences between the target population and the sampled population due to factors such as the inability to obtain a perfect sampling frame. For the purposes of this survey, the target population consists of U.S. citizens living outside the United States on November 8, 2016, who had requested an absentee ballot and who were not considered a Uniformed Services voter.

Generally, there is a need to ensure that the sampling frame does a good job of reflecting the target population (i.e., has good coverage), which in this context means that it would ideally contain all states where voters are registered and all absentee requesters in these states. A sampling frame is perfect when there is a one-to-one correspondence between members of the sampling frame and members of the target population. In practice, nearly every frame will encounter problems relating to members of the target population who are not included in the frame and members outside the target population who are included in the frame.

For this survey, overcoverage refers to any individuals in the sampling frame who are outside of the target population, such as Uniformed Services voters, individuals who were in the United States on November 8, 2016, or individuals who had died before November 8, 2016, and who should no longer be on the list. Undercoverage in this survey refers to individuals who should be on the list but who were not on the list; for example, individuals for whom both of the following are true: (1) the state, county, or municipality of registration did not provide a list of absentee ballot requesters, and (2) the state or local voter file does not otherwise indicate an overseas address for the voter.

## Sampling Frame

The FMG Team constructed the survey sampling frame by using the absentee voter data, which consist of the voter information described previously for known overseas citizens who requested an absentee ballot during the 2016 General Election. The preliminary sampling frame consisted of absentee voter data for voters registered in the District of Columbia and 49 of the 50 States ($N$ = 580,690) and state absentee voter data obtained by the FMG Team for voters registered in Minnesota ($N$ = 10,504). In total, the preliminary sampling frame for the OCPS had 591,194 records.

As previously described, the preliminary sampling frame used two main sources of records:

- **Absentee records**, which comprise individuals who had an overseas mailing address and were on a state-, county-, or municipality-provided list of individuals who requested an absentee ballot to vote in the 2016 General Election (i.e., by virtue of an explicit ballot request or from having permanent absentee status); and

- **Unconfirmed requesters**, who comprise individuals who had an overseas address listed in their state or local voter file but for whom there was not a record of a specific request for an absentee ballot in 2016 (i.e., generally due to the state, county, or municipality not having provided a list of absentee ballot requesters).

After obtaining the sampling frame, several rounds of address processing and quality control checks were conducted, given that the formats of addresses varied across state and local voter files and given that different countries have different address formats. Particular attention was given toward identifying and correcting any issues that could have meaningful statistical implications, overall or for country-specific estimates. One of the major focuses entailed improving the accuracy of the country classifications via both manual and semi-automated reviews, given the importance of these classifications in sample design and in weighting. The other major focus entailed cleaning the addresses themselves, with the goal of increasing the contact rate for the survey. Quality control checks were typically conducted independently of the address cleaning, and entailed manual review of randomly selected processed records. The processing and quality control checks were conducted iteratively so that results of the checks could inform improvements to the address processing.

In order to create a final sampling frame that most accurately reflected the target population, exclusion criteria were applied to remove cases that were outside of the target population, could not be contacted via mail, or were duplicates. Categories of excluded cases were removed sequentially, in the following order:

1. **No International Address**: If the absentee voting address was not overseas, or no overseas address was available, the case was excluded. It appeared that some records may have been for domestic voters who had requested absentee ballots at a U.S. address, which could have resulted from an overly inclusive search for overseas absentee voters. This category also included voters who had an Army Post Office (APO)/Fleet Post Office (FPO) military address or a missing address. All records from Tennessee ($N$ = 10,514) were excluded because no addresses were available for these individuals. Overall, among all cases with no international address, the vast majority (86.1%) had no address information or country information whatsoever; a sizable proportion (11.4%) had a U.S. or military address; a small proportion (2.4%) had partial address information but no country; and a very small proportion (0.1%) had a foreign country listed but no mailing information.

2. **Unmailable Addresses**: This category reflected cases in which there was a foreign country listed, and where the address field(s) were not completely blank, but where there was no usable address. For example, this included records in which the address field simply repeated country but provided no additional information; records in which there was a city and country but no street address; records in which the address fields did not contain a physical address, but instead contained a note indicating that a ballot had been emailed; and records in which the address fields contained a number but no street or city information.

3. **Bad Country Code**: This category reflected cases with mailing addresses in overseas

countries or territories outside the scope of the data collection effort. For the current data collection effort, the only country treated as outside of scope was North Korea. All other foreign countries, territories of foreign countries, microstates, or other overseas areas (e.g., Antarctica) were treated as country-eligible.

4. Duplicates: Next, processing was conducted to remove duplicates in the frame. As a first step, a search was conducted to verify that there were no sources of voter data that were duplicated in their entirety. Next, the file was searched for duplicates on various combinations of identifying variables. In determining which record to keep for a given set of cases resolving to a single entity, absentee records with attached voter file data were prioritized over unconfirmed requester records; holding this constant, the record with the most recent voter registration date was kept under the assumption that this would be the most up-to-date. The de-duplication process was conducted iteratively, and results of each de-duplication step were examined manually to prevent the removal of non-duplicates who had common names. For each step, the matches only applied to cases with complete data; for instance, if two cases had missing birthdate, they would not be treated as an exact match on birthdate. Before de-duplication, data hygiene steps were applied to clean and standardize the variables used for detecting duplicates. At multiple points, searches were conducted using overly inclusive search criteria and random clusters of matching records were manually examined to ensure the adequacy of the de-duplication procedures; results were used to refine the procedures and to validate the final procedures. The final set of de-duplication criteria included the following search parameters:

    - Exact match of first name, last name, and email address for voters for whom the state (or locality) had provided an email address.
    - Exact match of first name, last name, voter identification number, and state.
    - Exact match of first name, last name, and birthdate.
    - Exact match of first name, last name, and domestic ZIP code.
    - Exact match of Aristotle national voter file record ID.
    - Approximate match of first name and last name and exact match of birthdate, domestic county, and state. Approximate matches on names were obtained by applying the soundex algorithm to each name, then ascertaining whether the soundex-transformed first and last names matched exactly. The soundex algorithm indexes names by their English pronunciation, which in this case allows for identifying similarly pronounced names (e.g., in case of misspellings in voter files), although this could result in false positives, which is why there were stricter criteria for other fields.
    - Approximate match of first name and last name and exact match of birthdate, state, and country.

5. Unconfirmed Requesters from Jurisdictions Providing Absentee Record Lists: This category reflected voters who were not known to have requested an absentee record despite being in a jurisdiction in which such absentee request information was available. As previously described, the two sources of absentee voter data were absentee records (i.e., based on an explicit absentee ballot request or permanent absentee ballot status from the given jurisdiction) and unconfirmed requesters (i.e.,

based on having an overseas address available in the state or local voter file but for whom a specific absentee ballot request for 2016 could not be located). For states (or localities) where both types of records were available, only absentee records were used, under the assumption that such lists were authoritative when available. In such states, the existence of overseas addresses in the voter file could possibly reflect absentee ballot requests from previous elections.

Counts for the number of frame exclusions are provided in Table 3.1.

**Table 3.1: Frame Exclusions for OCPS 2016**

| Reason for Exclusion | Number of Cases | Percentage of Exclusions |
|---|---|---|
| No international address | 261,184 | 89.4% |
| Unmailable addresses | 1,416 | 0.5% |
| Bad country code | 7 | 0.0% |
| Duplicates | 2,442 | 0.8% |
| Unconfirmed requesters | 27,038 | 9.3% |
| **Total** | **292,087** | **100.0%** |

After removing 292,087 cases due to frame-level exclusions, the final sampling frame contained 299,107 records. Table 3.2 provides counts of the frame-level exclusions and final sampling frame by state and data source. To understand to what degree exclusions affect the representativeness of the frame relative to the population of interest, the edited frame is compared to data from the EAVS in Appendix A.

**Table 3.2: Counts of Excluded and Included Records by State and Data Source**

| | Excluded Records | | | Included Records | | |
|---|---|---|---|---|---|---|
| State | Records from Voter File | Absentee Records With Attached Voter Data | Total Exclusions | Records from Voter File | Absentee Records With Attached Voter Data | Final Total Frame Size |
| AK | 543 | 880 | 1,423 | 0 | 1,104 | 1,104 |
| AL | 257 | 0 | 257 | 704 | 0 | 704 |
| AR | 53 | 0 | 53 | 312 | 0 | 312 |
| AZ | 128 | 0 | 128 | 875 | 0 | 875 |
| CA | 1,642 | 0 | 1,642 | 80,508 | 0 | 80,508 |
| CO | 0 | 17,355 | 17,355 | 0 | 4,143 | 4,143 |
| CT | 1,905 | 0 | 1,905 | 1,186 | 0 | 1,186 |
| DC | 0 | 73 | 73 | 0 | 2,283 | 2,283 |
| DE | 1 | 30 | 31 | 0 | 975 | 975 |
| FL | 170 | 11,312 | 11,482 | 0 | 39,382 | 39,382 |
| GA | 1,694 | 9,554 | 11,248 | 0 | 433 | 433 |
| HI | 0 | 461 | 461 | 0 | 679 | 679 |
| IA | 1,274 | 38 | 1,312 | 0 | 234 | 234 |
| ID | 167 | 31 | 198 | 0 | 1,265 | 1,265 |
| IL | 895 | 102,180 | 103,075 | 0 | 474 | 474 |

| | | | | | | |
|---|---|---|---|---|---|---|
| IN | 7,712 | 931 | 8,643 | 0 | 1,395 | 1,395 |
| KS | 201 | 165 | 366 | 0 | 958 | 958 |
| KY | 6 | 0 | 6 | 28 | 0 | 28 |
| LA | 13 | 0 | 13 | 1,387 | 0 | 1,387 |
| MA | 3 | 2,339 | 2,342 | 0 | 3,125 | 3,125 |
| MD | 10,224 | 5,228 | 15,452 | 0 | 3,173 | 3,173 |
| ME | 45 | 0 | 45 | 4,638 | 0 | 4,638 |
| MI | 2,807 | 7,028 | 9,835 | 0 | 6,464 | 6,464 |
| MN | 0 | 1,020 | 1,020 | 0 | 9,484 | 9,484 |
| MO | 602 | 0 | 602 | 3,022 | 0 | 3,022 |
| MS | 4 | 0 | 4 | 58 | 0 | 58 |
| MT | 1,070 | 14 | 1,084 | 0 | 641 | 641 |
| NC | 0 | 288 | 288 | 0 | 10,434 | 10,434 |
| ND | 79 | 0 | 79 | 208 | 0 | 208 |
| NE | 21 | 0 | 21 | 666 | 0 | 666 |
| NH | 132 | 0 | 132 | 662 | 0 | 662 |
| NJ | 0 | 13,836 | 13,836 | 0 | 4,729 | 4,729 |
| NM | 303 | 0 | 303 | 2,292 | 0 | 2,292 |
| NV | 0 | 4,494 | 4,494 | 0 | 84 | 84 |
| NY | 5,493 | 2,342 | 7,835 | 0 | 41,189 | 41,189 |
| OH | 513 | 2,042 | 2,555 | 191 | 5,522 | 5,713 |
| OK | 0 | 2,110 | 2,110 | 0 | 194 | 194 |
| OR | 206 | 1,037 | 1,243 | 0 | 9,795 | 9,795 |
| PA | 912 | 8,091 | 9,003 | 0 | 10,414 | 10,414 |
| RI | 5 | 0 | 5 | 84 | 0 | 84 |
| SC | 10 | 0 | 10 | 25 | 0 | 25 |
| SD | 52 | 0 | 52 | 217 | 0 | 217 |
| TN | 0 | 10,514 | 10,514 | 0 | 0 | 0 |
| TX | 1,498 | 379 | 1,877 | 0 | 19,866 | 19,866 |
| UT | 5,726 | 0 | 5,726 | 101 | 0 | 101 |
| VA | 0 | 10,163 | 10,163 | 0 | 2,277 | 2,277 |
| VT | 0 | 1,487 | 1,487 | 0 | 893 | 893 |
| WA | 1,547 | 28,660 | 30,207 | 0 | 18,238 | 18,238 |
| WI | 76 | 0 | 76 | 1,810 | 0 | 1,810 |
| WV | 0 | 9 | 9 | 0 | 182 | 182 |
| WY | 0 | 7 | 7 | 0 | 104 | 104 |
| Total | **47,989** | **244,098** | **292,087** | **98,974** | **200,133** | **299,107** |

## Sampling Design Overview

The 2016 OCPS sample design aimed to yield a low margin of error (MOE) overall and lessen the impact of weighting while also meeting subgroup precision requirements. This was done via a single-stage stratified sample design, with equal probabilities of selection within design strata. For subgroups, key goals were to obtain a 5.5% MOE per world region and to allow for longitudinal analyses on changes over time. For longitudinal purposes, all available 2014 OCPS respondents

who were in the 2016 frame were sampled. After doing so, the FMG Team allocated the remaining sample to world regions in a manner that aimed to achieve a low MOE overall while meeting domain precision requirements. This was done in a manner that accounted for the anticipated effects of weighting. Within world region, the sample allocation was then adjusted to account for differences in country characteristics that were closely related to response rates and key survey measures in the 2014 OCPS, as to improve representativeness of the responding sample and reduce the anticipated effects of weighting.

After finalizing the sample allocation, the non-longitudinal records had been stratified by world region and country characteristics. The sample implementation aimed to further reduce sampling variability by using a sampling algorithm that ensures that key characteristics of the sample approximately reflect population distributions within strata. This was done by implicitly stratifying the sample based on type of absentee voter data, vote history, country characteristics, and domestic ZIP code.

## Sampling Design

Upon the completion of the construction of the final sampling frame, a single-stage stratified sample of size 45,000 was drawn from the final frame of size 299,107. The three main steps for sampling are summarized below, with additional detail provided in subsequent sections:

1. Strata assignment: Sample stratification is a method that can be used, in conjunction with a well-designed sample allocation, to reduce sampling variance and ensure that precision goals for key subgroups are met. Explicit stratification was conducted by placing voters in one of several mutually exclusive groups, or strata, and then conducting sampling independently for each stratum. For purposes of longitudinal data collection, voters who had responded to the 2014 OCPS were placed in a separate stratum. All other voters were stratified based on the cross-classification of world region and WGI index score, the latter of which reflects country characteristics and is associated with response rates and key survey measures.

2. Sample allocation: For this survey, sample allocation refers to how the total sample size of 45,000 was allocated to the different strata. This was done in a manner that compromised between domain estimation requirements (i.e., precision requirements for world region and other subgroups) and overall population estimation requirements. Given that all available 2014 OCPS respondents were sampled in 2016 (for longitudinal purposes), the main sample allocation decisions entailed how to allocate the remaining sample of size 38,644. An initial sample allocation was computed by world region in a manner that aimed to produce a low overall MOE after meeting a minimum MOE of 5.5% for each region (where possible). Within world region, the sample allocation was then adjusted by WGI index score category to increase the sampling rates for voters in countries that respond at lower rates, as to reduce weight variability.

3. Sampling implementation: After allocating the sample to explicit strata, the next step was to draw the sample. This was done using a sampling algorithm that ensured equal probabilities of selection within explicit strata, while also incorporating implicit strata to reduce sampling variability. Implicit stratification was achieved by sorting the list based on type of voter record, voter participation history, WGI index score, and ZIP code associated with the voter's U.S. address, and then taking the list ordering into account when drawing the sample. This allowed a more balanced sample to be achieved on these variables without explicitly dividing the sample on these lines. The sampling algorithm used was Chromy's method of sequential random sampling (Chromy, 1979),

incorporating a constant measure of size, which resulted in equal selection probabilities within explicit strata. After selecting the sample, the final step involved experimental assignment for the questionnaire experiment. The experimental assignment was applied by selecting the treatment group as a stratified random sample from the full sample.

### Strata Assignment

As noted above, sample stratification entailed assigning voters from the final sampling frame (*N* = 299,107) to mutually exclusive groups, or strata, so that sampling could be conducted independently for each stratum. Stratification can be used in conjunction with the sample allocation to ensure that precision requirements for key domains (i.e., subgroups) are met and can be used to reduce sampling variance. For the 2016 OCPS, after accounting for longitudinal data needs by forming a stratum for all available 2014 OCPS respondents, the remaining frame members were stratified primarily by world region and secondarily by WGI index score category. Stratification by 2014 OCPS response status and world region were used to allow for the sample allocation to ensure adequate precision for longitudinal estimates and estimates by world region. Within world region, further stratification by WGI index score category was applied to enable a sample allocation that would reduce weight variation. WGI index score is an average of the World Bank's Worldwide Governance Indicators, which reflect the quality of a country's governance. The WGI index score is associated with the quality of a country's infrastructure and was found to be meaningfully associated with response rates and with key survey measures in OCPS 2014.

As a starting point for stratification, for purposes of longitudinal data collection, voters who had responded to the 2014 OCPS and were available for sampling in the 2016 OCPS were placed in a separate stratum (*N* = 6,356). To accomplish this, it was necessary to first identify these prior respondents in the 2016 OCPS frame. As a first step in doing so, the final sampling frames for the 2014 OCPS (*N* = 179,862) and 2016 OCPS were linked together. This was done using a series of exact one-to-one file merges that roughly corresponded with the de-duplication criteria detailed previously in the Sampling Frame section, the main exception being that email address was not used for linking purposes. Before conducting these data merges, the FMG Team standardized the variables used in the match process and applied refinements to the de duplication process that had been applied for 2016 OCPS to the final 2014 OCPS sampling frame to allow for one-to-one matches. This resulted in slightly fewer records from the 2014 frame (*N* = 179,547). As a result of the frame-level merges, 6,283 eligible respondents from the 2014 OCPS were identified as being in the 2016 OCPS frame. Although this match procedure appeared sufficient for most of the frame, there were low match rates for a few states with high rates of missing frame information. Therefore, additional matching was conducted between the 2016 OCPS frame and the remaining unmatched eligible respondents from the 2014 OCPS. This entailed identifying cases that matched on first name, last name, and state, and manually reviewing the resulting matches. This resulted in identifying 99 possible matches, which, upon examination, yielded 73 matches (and 26 non-matches), for a total of 6,356 eligible respondents from the 2014 OCPS who were also in the final 2016 OCPS sampling frame. This final set of 6,356 individuals formed a stratum.

The primary stratification variable for the remainder of the frame was world region. This was based primarily on U.S. State Department classifications into six world regions. For stratification purposes, the Western Hemisphere was divided further into two regions based on proximity to the United States (i.e., Canada and Mexico vs. all others). Thus, the seven world regions were Africa, East Asia and Pacific, Europe and Eurasia, Near East, South and Central Asia, Canada and Mexico, and Western Hemisphere Other. Note that in the Sampling and Weighting chapters, world region refers to the above seven-way classification, whereas elsewhere in this report, it may reflect the original six-way categorization, with Western Hemisphere treated as a single region.

Each of these seven regions was then further divided into up to three different categories in a

manner that reflected country characteristics. The World Bank publishes six Worldwide Governance Indicators, which aim to quantify the quality of governance in different countries (Kaufmann, Kraay, and Mastruzzi, 2011). These indicators are continuous variables and the unit of each is that of the standard normal distribution, as per World Bank methodology. For this survey, WGI index score was computed by first averaging the World Governance Indicators by measure across years (1996–2016) and then across the six measures. Note that WGI index score was unavailable for 0.12% of population members, who were in geographic areas that were not included in the World Bank's database (typically microstates or small territories of foreign countries). For purposes of stratification, missing WGI index scores were imputed to the region population mean for persons within each of the seven world regions with non-missing WGI index score. Next, the WGI index score was classified into three categories: WGI index score of less than 0; WGI index score of at least 0 but less than 1; and WGI index score of at least 1. The proportions of the frame population classified into these categories were 17.6%, 17.6%, and 64.8%, respectively. For stratification, region was then cross-classified by WGI index score category. To avoid small strata, South and Central Asia was treated as a single stratum, due to the three WGI index score categories having frame population sizes of 5,554, 15, and 0, respectively.

Ultimately, the sampling frame had been partitioned into 17 mutually exclusive and exhaustive categories, including one category for the available OCPS 2014 respondents and 16 categories reflecting the cross-classification of world region by WGI index score category for the remaining population. Note that there were only 16 strata for world region by WGI index score category given that some world regions did not have countries with WGI index scores at each of the three levels.

### Sample Allocation

After the frame was divided into strata, the next step was to allocate the total sample size of 45,000 to the different strata. The number of available 2014 OCPS respondents ($n$ = 6,356) allowed for a sampling fraction of 100% for the longitudinal survey component, which would allow for estimates of maximum precision for longitudinal analyses, while still allowing for a sufficient sample size for cross-sectional analytical needs. Thus, after the FMG Team made this decision, the sample allocation decisions focused on how to allocate the remaining sample of 38,644.

Certain regions of the world are home to relatively small numbers of overseas citizens. As a result, it is necessary to apply higher selection probabilities for certain regions to ensure a sufficient number of respondents for estimating region-specific statistics. Thus, after allocating the longitudinal sample, the next step entailed allocating sample by world region in a manner that aimed to produce a low overall MOE after meeting a minimum MOE of 5.5% for each region (where possible). As a first step, a minimum region-specific sample size was specified as the lesser of: (1) the number of sample members necessary to produce the minimum MOE; and (2) the region frame population size (i.e., as to avoid sampling rates of greater than 100%). Then, mathematical optimization methods were used to maximize the minimum sampling rate in any world region, subject to meeting the minimum region-specific sample size constraints and subject to achieving an overall sample size for non-longitudinal strata of no greater than 38,644. This resulted in a sampling rate of 100% for Africa (for which an anticipated MOE of 5.5% was not possible), sampling rates of 8.7% for the three most populous world regions (in terms of overseas citizens), and sampling rates that would yield an anticipated MOE of 5.5% for the other three world regions.

For sample allocation purposes, the anticipated margin of error was for a 95% confidence interval of a population proportion parameter of 50%, taking into account the anticipated effects of nonresponse and weighting. Various simplifying assumptions were made, such as the use of a stratified simple random sampling (STSRS) design, an ignorable finite population correction, and a negligible impact of the longitudinal stratum on region precision. With respect to the last point, the longitudinal stratum reflected between 1.6% and 3.5% of overseas citizens each world region, and, therefore, would not have a major impact on the precision of world region estimates. Survey

response rates for each world region were assumed to be 85% of the design-weighted survey completion rates from the 2014 OCPS for absentee records, reflecting 90% of the 2014 sample, and computed as the proportion of sample members who were eligible respondents. This multiplicative factor of 0.85 was applied to reflect OCPS population differences between mid-term and presidential election years, modest differences in 2014 OCPS response rates between absentee records and unconfirmed requesters, and the survey administration change from web-push to web-only.

The world region MOE calculations above further reflected the anticipated effects of weighting, which were simulated via 2014 OCPS data. It was necessary to simulate these effects, rather than directly using the estimated design effects from 2014 data, given that the 2014 sample design entailed disproportional sampling within world region, based primarily on country size. This entailed drawing a probability proportional to size with replacement (PPSWR) sample of size 36,000,000 from the full 2014 sample of absentee records ($n$ = 36,000), with selection probabilities proportional to the 2014 design weights. After restricting the sample to respondents, an adjustment to the final survey weight was applied as the inverse of the PPSWR selection probability. This can be thought of as roughly approximating the effect of undoing the disproportional sampling, by adding an additional sampling stage wherein the probability of selection is inversely proportional to the original base weights. Kish's design effect from weighting[3] was then computed separately by world region for the adjusted final weights to approximate the anticipated effects of nonresponse and calibration adjustments, and this approximate design effect was incorporated into the MOE calculations. Note that this PPS sample of size 36,000,000 had initially been drawn as 1,000 separate PPSWR samples of size 36,000, with design effects averaged across samples, although it was ultimately treated as a single sample, given that doing so resulted in anticipated design effects that tracked slightly more closely with actual design effects for strata wherein the base weights had minimal variation to begin with.

After allocating the non-longitudinal sample to world regions, the sample allocation was then modified by WGI index score category to improve representation of groups that respond at lower rates to reduce anticipated weight variability for the final set of survey respondents. This step did not affect the overall sample size for each world region, but did result in disproportional sample allocations within region for all regions except for Africa (which was sampled with certainty) and South and Central Asia (which was not stratified by WGI index score category, as described in the previous section, to avoid small stratum sizes). Within each applicable region (i.e., excepting Africa and South and Central Asia), the sampling rate for each WGI group was specified as being inversely proportional to the 2014 response rate by WGI group. If the response patterns in 2016 were similar to those in 2014, this would result in a proportional allocation to WGI group within region for the set of responding sample members in that region. In computing this allocation, the FMG Team computed response rates as the design-weighted survey completion rates for 2014 OCPS absentee records for each applicable cross-classification of world region and WGI category.[4]

The final strata, frame population sizes, and sample sizes are displayed in Table 3.3 on the following page.

3 Kish's design effect from weighting, commonly known as the unequal weighting effect (UWE), is computed as $1 + L$, in which $L = n^{-1} \sum_s \frac{(w_i - \bar{w})^2}{\bar{w}^2}$ is the squared coefficient of variation of the sample weight $w_i$. This $1 + L$, termed the relative loss due to weighting (Kish, 1992) is used to evaluate weight variability and its effect on precision of the point estimates and is a reasonable approximation for the design effect (DEFF) in single-stage designs in which the weights are unrelated to the outcome of interest (e.g., see Spencer, 2000).

4 For Western Hemisphere Other, the 2014 OCPS response rate for WGI index of less than 0 was slightly higher (15.2%) than for the WGI index of 0–1 (14.7%), which was contrary to patterns for other regions and may have resulted from sampling variability for estimating population-level response propensities. Therefore, these categories were pooled for response rate computations.

| Table 3.3: Strata Definitions, Population Sizes, and Sample Sizes | | | |
|---|---|---|---|
| World Region | WGI Category | Population Size | Sample Size |
| Africa | WGI < 0 | 4,504 | 4,504 |
| Africa | 0 ≤ WGI <1 | 1,871 | 1,871 |
| East Asia and Pacific | WGI < 0 | 14,218 | 1,593 |
| East Asia and Pacific | 0 ≤ WGI <1 | 5,900 | 621 |
| East Asia and Pacific | 1 ≤ WGI | 34,405 | 2,507 |
| Europe and Eurasia | WGI < 0 | 2,572 | 424 |
| Europe and Eurasia | 0 ≤ WGI <1 | 21,938 | 2,059 |
| Europe and Eurasia | 1 ≤ WGI | 110,854 | 9,241 |
| Near East | WGI < 0 | 3,537 | 772 |
| Near East | 0 ≤ WGI <1 | 17,343 | 2,784 |
| South and Central Asia | Any | 5,445 | 4,051 |
| Western Hemisphere—Canada and Mexico | WGI < 0 | 7,820 | 1,245 |
| Western Hemisphere—Canada and Mexico | 1 ≤ WGI | 41,802 | 3,053 |
| Western Hemisphere—Other | WGI < 0 | 13,476 | 2,660 |
| Western Hemisphere—Other | 0 ≤ WGI <1 | 4,261 | 841 |
| Western Hemisphere—Other | 1 ≤ WGI | 2,805 | 418 |
| **Total Records Stratified by World Region and WGI Category** | | **292,751** | **38,644** |
| Longitudinal Stratum: 2014 OCPS Eligible Respondents | | 6,356 | 6,356 |
| **Total Records** | | **299,107** | **45,000** |

Note: Africa, Near East, and South and Central Asia do not have any countries with a WGI index score of greater than 1. Western Hemisphere—Canada and Mexico does not have any countries with a WGI index score between 0 and 1. South and Central Asia WGI categories of less than 0 and between 0 and 1 were combined to avoid small strata sizes.

## Sampling Implementation

After allocating the sample to explicit strata, the final step was to draw the sample. This was done in a manner that ensured equal selection probabilities within explicit strata, while incorporating implicit strata to reduce sampling variability. More specifically, sampling was conducted using Chromy's method of sequential random sampling (Chromy, 1979), using the explicit strata and sample allocations from the previous step, and assigning a measure of size of 1 to each unit as to result in equal probabilities of selection within strata. Further, implicit stratification was achieved by sorting the list based on type of voter record, voter participation history, WGI index score, and ZIP code associated with the voter's U.S. address. As previously indicated, implicit stratification was used to improve the balance of the resulting sample with respect to the variables used in implicit stratification. Sampling was implemented in Stata using the FMG-written *ppschromy* package (Mendelson, 2014).

Chromy's sequential selection algorithm implicitly stratifies the sample within each explicit stratum by selecting a sample sequentially after taking into account a sort ordering. This implicit stratification can yield benefits in terms of variance reduction by spreading the sample throughout the given explicit strata. Further, Chromy's algorithm uses hierarchic serpentine sorting within each explicit stratum, which improves over simply sorting all variables in ascending order, by virtue of reversing the sort orderings for lower levels of sorting variables when the boundary for higher levels of sorting variables is crossed. This results in increased similarity of nearby cases in the sorted list.

Four sort ordering variables were used. These variables were selected primarily on the basis of their anticipated relationships with response propensity (i.e., an individual's likelihood to respond to the survey) and survey measures.

1. **Type of voter record** is a binary variable that refers to whether the record was from an absentee records list or unconfirmed requester data. This reflects the types of records that could be obtained from a given state or locality (as applicable). This variable was previously incorporated into the explicit stratification for the 2014 OCPS.

2. **Voter participation history** was computed based on whether voters had participated in the 2014 and/or 2016 General Elections, as indicated in the voter file. The categories created were: (1) voted in 2014 (regardless of voting in 2016); (2) voted in 2016 but not in 2014; and (3) voted in neither. Voter participation history was previously found to be a strong predictor of estimated response propensity as well as key survey measures.

3. **WGI index scores** were obtained. As previously described, these index scores had been computed for each country as a measure of the effectiveness of governance, and they are strongly related to per capita economic output. These scores were used collectively as a sorting variable as they were previously found to relate strongly to estimated response propensities (e.g., level of infrastructure in a country could relate to contact rates) and survey measures.

4. **ZIP codes** were used as the final sorting variable. The ZIP codes reflected the low-level geography of the voters' U.S. addresses and, in most cases, the ZIP+4 code was available. Although ZIP codes do not provide a perfect way of reflecting geography in the United States, the first two digits reflect a state-level ordering and a small numerical difference between ZIP codes typically indicates that the regions are nearby. For the small proportion of cases with missing ZIP code data, this variable was imputed as the median ZIP code for the state to make sure that these cases were grouped with others from their state.

By incorporating sorting variables that reflected individual-, country-, and state-level characteristics, the sort ordering enabled the implicit stratification of the sampling frame in a manner such that nearby cases were of high similarity. Implicit stratification on these measures was expected to reduce sampling variability and, therefore, to increase the precision of estimates; this effect might be particularly meaningful for smaller domains.

After selecting the sample, the final step entailed assignment of the experimental condition. This involved assigning all sample units from the full sample ($n$ = 45,000) to the treatment ($n$ = 4,500) or control ($n$ = 40,500) conditions. This was done via a stratified simple random sampling (STSRS) design. The same stratification was used for the experimental design as had been used for drawing the sample. The sampling rate for the experimental condition was approximately 10% in each stratum, meaning that for each stratum, approximately 10% of the full sample would be randomly selected for the treatment condition, with the remaining sample members assigned to the control condition. Note that the experimental assignment sampling rates for individual strata differed slightly, due to rounding.

Note that the STSRS design was employed in the experimental assignment—and implicit stratification was not used—to simplify the analysis of the experimental condition. Implicit stratification typically reduces sampling variance while complicating the task of variance estimation. Specifically, the joint probabilities of selection must be computed for sample members to compute unbiased variance estimates, and the implicit stratification scheme used for the overall sample would complicate this task. A solution is often to ignore the implicit stratification, which results in higher (i.e., more conservative) variance estimates, and thus the benefits of this

extra stratification are not reflected in the MOE. For the overall sample, the benefits of improved precision in point estimates were viewed as outweighing the cost in terms of the increased complication of variance estimation. However, with respect to the survey experiment, the complications associated with implicit stratification were viewed as outweighing its potential benefits.

# SURVEY WEIGHTING FOR THE OVERSEAS CITIZENS POPULATION SURVEY

Sample weighting was carried out to accomplish the following objectives:

- Adjust for differences in the probability of selection from the frame;
- Reduce possible biases that could occur because the characteristics of nonrespondents may have been different from those of the respondents; and
- Improve the precision of the survey-based estimates (Skinner, Holt, & Smith, 1989).

The survey weights were computed in several steps:

1. A disposition code was assigned to each sample member indicating whether the sample member was an eligible respondent, an eligible nonrespondent, an ineligible sample member, or a sample member whose eligibility status was unknown.
2. The base weights were computed as the inverse of each sample member's probability of selection from the frame.
3. The base weights were adjusted to account for sample members whose eligibility for the survey could not be determined (i.e., sample members with unknown eligibility). These sample members neither returned a questionnaire nor provided any other information to indicate that they were ineligible for the study.
4. The weights were adjusted to account for eligible sample members who did not respond to the survey (i.e., eligible nonrespondents). These sample members were eligible but did not have usable survey data because they did not complete the survey.
5. The weights were calibrated using a raking technique to control totals, which had been computed as population counts or estimated population counts from the sampling frame. Calibration adjustments were used because they help correct for distortions in the sums of weights caused by nonresponse.

## Assignment of Disposition Codes

Before the weights were calculated, each case was assigned a disposition code indicating whether the sample member was an eligible respondent, an eligible nonrespondent, an ineligible sample member, or a sample member whose eligibility status was unknown. These disposition codes were a key input in weighting and in the computation of response rates. Disposition codes were assigned in accordance with the standards defined by the American Association for Public Opinion Research (AAPOR, 2016).

### Eligibility Status

For the sample member to be considered eligible, he or she needed to be a U.S. citizen who was registered to vote on November 8, 2016, residing outside the United States on November 8, 2016, and not a Uniformed Services voter. Eligibility was based on information from the sampling frame, information collected from the sample member or an acceptable proxy (e.g., a spouse or other household member) as part of the fielding process, and responses to three key survey questions. Individuals surveyed were assumed to be registered voters based on the source of the sampling

records; eligibility based upon the remaining criteria was determined primarily in relation to responses to survey screening questions, which will be detailed in this section.

Question 1, which asked for sample members' primary residence as of the 2016 General Election, was used to determine whether the individual was residing outside of the United States on that date. If the sample member affirmatively indicated being in a country other than the United States on November 8, 2016, then he or she was determined to be *overseas eligible*. Sample members who indicated that they resided in the United States or its territories during the November 2016 General Election were determined to be *overseas ineligible*. If the sample member did not provide an answer to Question 1, then he or she was considered neither *overseas eligible* nor *overseas ineligible*, but was treated as having *unknown overseas eligibility*.

Question 7, which asked for the primary reason that the voter was outside of the United States as of the 2016 General Election, was used to determine whether an individual was *civilian eligible*; that is, not a Uniformed Services voter (i.e., a military member, spouse, or dependent). Sample members were considered *civilian ineligible* if they indicated that the primary reason that they were outside of the United States on November 8, 2016, was that the sample member, a partner, and/or a family member was serving in the Military. Sample members who selected other options were determined to be *civilian eligible*. Given that nearly all individuals replying to Question 7 were determined to be *civilian eligible* (99.9%), individuals who did not provide a response to Question 7 but who met all other survey eligibility criteria were assumed to be *civilian eligible*.

Question 33, which asked for the voter's country or countries of citizenship, was used to determine whether an individual was *citizenship eligible*. An individual who indicated being a citizen of another country and did not affirmatively indicate being a citizen of the United States was treated as *citizenship ineligible*. Sample members who did not select any of the main response options (i.e., indicated neither U.S. citizenship nor foreign citizenship) were treated as having *unknown citizenship eligibility*.

### Completion Status

In order for the questionnaire to be considered complete, the sample member needed to complete at least 25% of the total questionnaire. For the purposes of computing completion status, any question allowing the sample member to select multiple responses (e.g., Question 31) was counted as one item instead of as multiple items.

### Case Dispositions

Final case dispositions for weighting were determined using information from field operations and returned surveys. Case dispositions were assigned for weighting purposes based on eligibility and completion of the survey.

1. **Questionnaire returned—Complete/Eligible:** The sample member completed at least 25% of the questionnaire and was determined to be eligible.

2. **Explicit refusal of survey (by proxy):** An acceptable proxy contacted the FMG Team to indicate that the sample member was not willing to participate in the survey.

3. **Explicit refusal of survey (by sample member):** The sample member contacted the FMG Team to indicate that he or she was not willing to participate in the survey.

4. **Returned too incomplete to process:** The survey was returned with less than 25% completed.

5. **Unavailable during entire fielding:** The sample member, or an acceptable proxy, contacted the FMG Team to indicate he or she was unavailable to complete the survey during the fielding period.

6. **Technical issues:** The sample member contacted the FMG Team to indicate that he or she was unable to complete the survey due to technical issues, such as a lack of Internet access.

7. **Nothing ever returned:** No reply was received from the sample member nor were the survey materials returned by the postal system.

8. **Refused by addressee:** Delivery of the survey materials was explicitly refused at the point of delivery.

9. **Cannot be delivered as addressed:** The survey materials did not reach the sample member. They were returned by the postal system as "return to sender."

10. **Sample member moved, no forwarding address:** The survey materials were returned by the postal system because the sample member moved but no forwarding address was available.

11. **Unknown citizenship eligibility:** The sample member did not provide an answer to the question determining citizenship eligibility.

12. **Unknown overseas eligibility:** The sample member did not provide an answer to the question determining overseas eligibility.

13. **Ineligible—Not overseas on November 8, 2016:** The sample member (or an acceptable proxy) corresponded with the FMG Team to indicate that the sample member was not overseas on November 8, 2016. This category also includes three sample members for which their country had been misclassified and the address turned out to be domestic.

14. **Ineligible—Uniformed Services voter:** The sample member (or an acceptable proxy) corresponded with the FMG Team to indicate that he or she was living out of the country on November 8, 2016, due to being in the Military or due to his or her partner or family member being in the Military.

15. **Ineligible—Not U.S. citizen:** The sample member (or an acceptable proxy) corresponded with the FMG Team to indicate that he or she was not a U.S. citizen as of November 8, 2016.

### Final Disposition Code (DISP)

Collapsing across the case dispositions resulted in the final disposition code (DISP) for each case with the categories below.

- **ER—Eligible respondents**: This group consisted of all sample members who returned a nonblank questionnaire that indicated they were eligible and completed 25% or more of the survey.

- **ENR—Eligible nonrespondents**: This group consisted of all sample members who explicitly refused to participate in the survey, returned an incomplete questionnaire, were unavailable during the fielding period, or were unable to complete the survey due to technical issues.

- **IN—Ineligible sample members**: This group consisted of sample members who were not overseas, were Uniformed Services members, or were not U.S. citizens as of November 8, 2016. This was determined using information from the sampling frame, via survey questionnaires, or through some other communication.

- **UNK—Other sample members whose eligibility was unknown**: This group consisted of sample members for whom nothing was ever returned, for whom delivery was refused, whose survey materials could not be delivered as addressed, who moved without leaving a forwarding address, or for whom U.S. citizenship status or overseas residency on November 8, 2016, could not be established.

Table 4.1 provides the frequencies for the case dispositions for each final disposition code.

**Table 4.1: Case Dispositions and Final Disposition Codes**

| DISP | Case Disposition | Number of Cases | % Sample Cases |
|---|---|---|---|
| Eligible Respondents | | | |
| ER | Questionnaire returned: Complete/Eligible | 10,965 | 24.37% |
| Eligible Nonrespondents | | | |
| ENR | Explicit refusal of survey (by proxy) | 8 | 0.02% |
| ENR | Explicit refusal of survey (by sample member) | 94 | 0.21% |
| ENR | Returned too incomplete to process | 980 | 2.18% |
| ENR | Unavailable during entire fielding | 29 | 0.06% |
| ENR | Technical issues | 56 | 0.12% |
| Ineligible | | | |
| IN | Ineligible: Not overseas on November 8, 2016 | 298 | 0.66% |
| IN | Ineligible: Uniformed Services voter | 11 | 0.02% |
| IN | Ineligible: Not U.S. citizen | 101 | 0.22% |
| Unknown Eligibility | | | |
| UNK | Nothing ever returned | 27,070 | 60.16% |
| UNK | Refused by addressee | 454 | 1.01% |
| UNK | Cannot be delivered as addressed | 4,262 | 9.47% |
| UNK | Moved, left no forwarding address | 325 | 0.72% |
| UNK | Unknown citizenship eligibility | 298 | 0.66% |
| UNK | Unknown overseas eligibility | 49 | 0.11% |
| | **TOTAL** | **45,000** | **100.00%** |

Note: Figures may not add up to displayed total due to rounding.

## Calculation of Base Weights

After the disposition codes were determined, the first step in computing the weights was to calculate the base weight for each sample member. The base weight was equal to the inverse of the probability of being selected from the frame. Given that the probability of selection varied by 2014 OCPS response status, world region, and WGI index score category, this step allowed for unbiased estimates that reflected the sample design before any nonresponse.

The sampling frame of $N$ = 299,107 units was partitioned into $H$ = 17 nonoverlapping strata. Each stratum consisted of $N_h$ units, so that:

$$N = \sum_{h=1}^{H} N_h$$

A sequential random sample of $n_h$ units was selected without replacement from each stratum population of $N_h$, with individuals within a given stratum having an equal probability of selection. Given this design, the base weight for the *i*th sampled unit in a given stratum *h* was calculated as:

$$d_{hi} = \frac{N_h}{n_h} \qquad i = 1, \ldots, n_h$$

Thus, for each person classified in stratum $h$, the base weight was computed as the ratio of the total population for that stratum to the number sampled for that stratum. Note that $n_h$ is the number of units initially sampled in stratum $h$ without regard to whether they ultimately participated in the survey.

## Nonresponse Weighting Adjustments

In an ideal survey, all the units in the inferential population would be eligible to be selected into the sample, and all those selected to participate in the survey would actually do so. In practice, however, these conditions rarely occur. Often, some of the sampled units do not respond, some sample units are discovered to be ineligible, and the eligibility status of some units cannot be determined. If these problems are not addressed in the weighting scheme, the estimates of the survey may be biased. Thus, nonresponse weighting adjustments are used to deal with sample members with unknown eligibility and eligible nonrespondents.

To compensate for unit nonresponse, the weights were adjusted in two stages: first, for sample members with unknown eligibility; next, for survey completion among eligible sample members. The first stage of nonresponse adjustment accounted for the fact that the eligibility status of some sample members could not be determined. The second stage of nonresponse adjustment addressed the fact that some sample members known to be eligible did not complete the questionnaire, for instance, by returning an incomplete questionnaire. At each stage, the weights of usable cases were inflated to account for ones that were unusable.

For the first nonresponse adjustment, a logistic regression model was estimated to predict each sample member's probability of having known eligibility for the survey (known eligibility vs. unknown eligibility). The logistic model was weighted by the base weights. The predictors used in the final model were voter participation history,[5] world region,[6] age,[7] age squared, World Governance Indicator (WGI) index score,[8] and state.[9] These variables were selected because they had a meaningful association both with estimated response propensity and with key survey metrics; special care was taken in accounting for the patterns of missing data.

5 Voter participation history was treated as categorical and included four substantive categories and two categories reflecting missing data. The substantive categories reflected the four-way cross-classification of whether individuals voted in the 2014 and/or 2016 General Elections. Sample members with missing voter participation history were distinguished based on the source of voter data (i.e., absentee records vs. unconfirmed requesters).

6 The world region categories were based on the seven-way classification described in the sampling chapter.

7 Individuals with missing age data had their age imputed to the mean and then were reflected separately in the model via indicator variables, reflecting the pattern of missing data.

8 Individuals in countries with no WGI index score had their score imputed to the world region population mean for persons in the world region.

9 A categorical variable was included in the model for state. States with fewer than 250 sample members were combined into a single category, which was then split into two categories based on the source of voter data (i.e., absentee records vs. unconfirmed requesters).

Before computing nonresponse adjustments, validation of the initial country classifications was conducted via comparing survey responses for Question 3, which asked country of residence, with country from the sampling frame. This resulted in identifying a small number of systematic errors in country classifications, which led to an additional round of frame cleaning for the country classifications for the affected countries. Note that corrections for systematic errors were applied at the frame level in a manner that was consistent for nonsampled units, responding sample members, and nonresponding sample members, to allow for the use of the corrected variables in the nonresponse models without biasing the estimated response propensities. This process resulted in corrections to country for 0.14% of frame members.[10] The world region and WGI index score predictors in the nonresponse adjustment models reflected these corrected classifications. This process also resulted in reclassifying three individuals as country-ineligible based on domestic addresses in the frame; all three records happened to have been in certainty strata and were, therefore, sampled.

Note that the three units that were identified as being ineligible at the full-sample level (i.e., sampled individuals who were subsequently identified as having U.S. addresses) were excluded from the logistic models and received an adjustment factor of 1. The reason for this was that the procedures for identifying these cases were applied to all cases in the sample (by virtue of having been applied to the full frame) and were therefore reflected in the base weights. As such, these cases did not need to receive an additional adjustment.

With the exception of sample-level excluded cases, adjustment factors were computed for cases with known eligibility as the inverse of model-estimated probabilities. The weights of cases with known eligibility were multiplied by this adjustment factor, whereas the weights of cases with unknown eligibility were removed, thereby redistributing the weights of cases with unknown eligibility to cases with known eligibility.

For the second nonresponse adjustment, the weights of eligible nonrespondents were redistributed to eligible respondents to account for eligible sample members who did not complete the survey. A logistic regression model was estimated predicting the probability of survey completion (i.e., being an eligible respondent) among eligible individuals (i.e., eligible respondents and eligible nonrespondents), weighted by the known-eligibility-adjusted weights. The predictors considered for inclusion were the same as those included in the known eligibility model, except with simplifications to the voter participation history and state variables to reflect the smaller number of cases entering the model.[11] The predictors in the final model were voter participation history, age, age squared, WGI index score, state, and an indicator variable for missing age data;[12] world region had been dropped due to lack of significance. After estimating the probability of survey completion, the known-eligibility-adjusted weights for eligible respondents were multiplied by the multiplicative inverse of this model-estimated probability, whereas the weights of eligible nonrespondents were removed, thereby redistributing the weights of eligible nonrespondents to

10 This process resulted in manually reexamining the addresses of all units in the frame initially classified as being in Chad, Guinea, Mali, Niger, and Swaziland, which had moderate to high levels of frame misclassification. This process also resulted in reclassifying 4.6% of records initially classified as being in China as being located in Hong Kong or Taiwan.

11 For voter participation history, voted in 2014 only and voted in 2016 only were combined into a single category, and the two categories of cases with missing data were combined into a single category. For state, the minimum sample size threshold for allowing a state to receive its own indicator variable (rather than being combined into one of the two "other" categories) was increased from 250 to 1,000 members of the original sample.

12 these are variables which are both observed for everyone in the sample and are potential predictors of both non-response and outcomes of interest. As per little & Rubin (2002), the modern statistical literature distinguishes between three types of missing data: data that are missing completely at random (MCAR), missing at random (mar), and not missing at random (NMAR).[1] methods for accounting for unit nonresponse in surveys via weighting, both in this survey and more generally, typically assume that the mechanism for unit-missing data is mar—that is, that conditional on observed characteristics, that the data missingness is independent of the outcome measures. However, respondents and non-respondents may also differ with respect to other, unobserved outcome-relevant characteristics for which data is not available for the full sample violating this mar assumption. One potential example of such an unobserved characteristic would be English language proficiency, which potentially affects response propensity due to the survey instrument only being available in English as well as outcomes of interest such as exposure to election-oriented media. Consequently, the weighted sample of respondents may still differ from the full sample with respect to outcomes of interest, leading to biased estimates of population average outcomes.

eligible respondents. Ineligible individuals received an adjustment factor of 1 (i.e., their weights were not modified).

Applying nonresponse adjustments resulted in the final weights before calibration. Distributions of the base weights, adjustment factors, and final weights before calibration by final disposition code are shown in Table 4.2.

**Table 4.2: Distribution of Weights and Adjustment Factors by Final Disposition Code**

| Disposition Code Category | Statistic | Base Weight ($d_i$) | Eligibility Status Adj. Factor ($f_i^{A1}$) | Complete Status Adj. Factor ($f_i^{A2}$) | Final Weight Before Calibration ($w_i^{NR}$) |
|---|---|---|---|---|---|
| Eligible Respondents | N | 10,965 | 10,965 | 10,965 | 10,965 |
| | MIN | 1.00 | 1.59 | 1.02 | 1.71 |
| | MAX | 13.72 | 34.01 | 1.99 | 321.50 |
| | MEAN | 6.71 | 3.84 | 1.12 | 26.60 |
| | STD | 5.31 | 2.63 | 0.06 | 25.67 |
| Eligible Nonrespondents | N | 1,167 | 1,167 | 1,167 | 1,167 |
| | MIN | 1.00 | 1.64 | -- | -- |
| | MAX | 13.72 | 33.66 | -- | -- |
| | MEAN | 7.00 | 4.58 | -- | -- |
| | STD | 5.00 | 3.47 | -- | -- |
| Ineligible | N | 410 | 410 | 410 | 410 |
| | MIN | 1.00 | 1.00 | 1.00 | 1.00 |
| | MAX | 13.72 | 26.79 | 1.00 | 114.69 |
| | MEAN | 5.95 | 4.67 | 1.00 | 23.36 |
| | STD | 4.88 | 3.34 | 0.00 | 20.65 |
| Unknown Eligibility | N | 32,458 | 32,458 | 32,458 | 32,458 |
| | MIN | 1.00 | -- | -- | -- |
| | MAX | 13.72 | -- | -- | -- |
| | MEAN | 6.62 | -- | -- | -- |
| | STD | 4.88 | -- | -- | -- |

Thus, after both adjustment stages, the nonresponse-adjusted weight for sample member (*i*) could be written as $w_i^{NR} = d_i \cdot f_i^{A1} \cdot f_i^{A2}$. The weight $w_i^{NR}$ was the final weight before calibration. Note that after the two stages of nonresponse adjustments, only the eligible respondents (*ER*) and ineligible sample members (*IN*) had nonzero weights. The weights of sample members with unknown eligibility (*UNK*) had been removed during the first adjustment stage, and the weights of eligible nonrespondents (*ENR*) had been removed during the second adjustment stage. The ineligible sample members (*IN*) represented a unique and well-defined group whose weights could not be redistributed to the other eligibility categories.

## Calibration of Weights

The final step in the calculation of the weights involved the modification of the nonresponse-adjusted weights so that the sample distribution of important demographic characteristics was similar to the known distribution in the population. This is referred to as calibration and can be used to decrease variance and improve the efficiency of estimators (e.g., Valliant, Dever, and Kreuter, 2013).

Calibration adjustments were calculated using a raking procedure. Raking allows the calibrated weights to reflect known characteristics of the population. This is done to ensure consistency between complete population counts and sample data. Raking is used in situations in which the interior cells of the cross-tabulation are either unknown or sample sizes in some cells are too small for efficient estimation in poststratification to the full cross-tabulation.

Given that three cases from the final sampling frame had been identified after sampling as ineligible via criteria that had been applied to the full sampling frame, these cases could be excluded from the calibration process. Thus, such cases did not enter the calibration process, and the control totals reflected a final population of 299,104 frame-eligible individuals with overseas addresses.

The weights were raked on the four raking dimensions toward population totals or estimated population totals from the frame. Each raking dimension was cross-classified by voter participation history given that this was strongly associated both with response rates and with key survey measures. Categories with insufficient numbers of respondents were collapsed with other similar categories where necessary. Voter participation history was initially computed by cross-classifying the individual's general election voter participation history from 2014 and 2016, forming four categories:

1. Voted in neither the 2014 nor 2016 General Election;
2. Voted in the 2014 General Election only;
3. Voted in the 2016 General Election only; and
4. Voted in both the 2014 and 2016 General Elections.

There were too few cases in category (3) above to fully cross-classify this category in every raking dimension. Given that the response rate for category (3) was much closer to that of category (2) than to that of (4), categories (2) and (3) were combined.

The four raking dimensions used were:

1. Voter participation history by country (Raking Dimension 1);
2. Voter participation history by state (Raking Dimension 2);
3. Voter participation history by sex (Raking Dimension 3); and
4. Voter participation history by age group (Raking Dimension 4).

In certain cases, there were limited amounts of missing data that had to be taken into account during the weighting process. One option for accounting for missing data in weighting is to allow such cases to form their own raking cells. However, in some cases, this would produce small cell sizes that could substantially drive up design effects; further, in "zero cells" in which there are

population members but zero respondents, it is impossible to directly apply adjustments. Another option for dealing with missing data is to combine groups with other similar groups where they exist. An additional option is to use an imputation approach for purposes of assigning cases to the raking categories.

The general approach taken for missing frame data was to avoid collapsing cells where possible; in limited cases in which similar cells were available and it was necessary to do so, this option was used. However, in cases in which a similar cell was not available and the number of respondents was very low, a hot deck imputation approach was used. The imputation approach took into account the frame distribution of the variables for individuals in a given category (e.g., voter participation history group), and each missing value in the frame was replaced with a non-missing value from a random donor in the frame with non-missing data within the category (with replacement of donors). This ensured that the distribution of the imputed variables within a given category was approximately equal to the distribution of non-missing data within that category. Given that internal consistency of control totals is important in allowing the raked weights to converge, for raking dimensions in which imputation was necessary, imputed values were incorporated into estimated population totals to ensure internally consistent control totals across raking dimensions.

The decision rules for creating raking categories, collapsing cells, and conducting imputation were as follows:

- Voter participation history: As previously indicated, the three main voter participation categories of interest were (1) those who voted in neither the 2014 nor 2016 General Election; (2) those who voted in the 2014 General Election only or the 2016 General Election only; and (3) those who voted in both the 2014 and 2016 General Elections. Those with any missing voter participation history data were allowed to form a separate category.

- Raking Dimension 1 (voter participation history by country): For each country[13] for which at least 450 individuals were sampled from the absentee portion of the sampling frame, the voter participation history categories were cross-classified by country. Countries with fewer than 450 sample members were combined by world region before cross-classifying with voter participation history. Cells were collapsed as follows:

    - Due to a small number of individuals who had missing voter participation history data, these individuals were cross-classified by world region rather than by country.

    - For China, the category of individuals who had voted in only one of the 2014 and 2016 General Elections was combined with the category of individuals who voted in both the 2014 and 2016 General Elections, due to small cell sizes.

- Raking Dimension 2 (voter participation history by state): For each state for which at least 450 individuals were sampled, the voter participation categories were cross-classified by state. States with fewer than 450 sample members were combined into a single category, which was then divided by record source (i.e., absentee records versus unconfirmed requesters) before cross-classifying by voter

13 For purposes of simplicity in reporting, we use the term "country" in this chapter to refer to any country, microstate, overseas territory of a foreign country (e.g., French Polynesia), or other foreign area (e.g., Antarctica).

participation history. After cross-classifying state (or group of states) by voter participation history, changes were made to this dimension as follows:

- For Colorado, Maine, Maryland, New Jersey, and Ohio, the category of individuals in the given state who had voted in neither the 2014 nor 2016 General Election was combined with the category of individuals who voted in only one of the 2014 or 2016 General Elections, due to small cell sizes.

- Individuals with missing voter participation history in Colorado, Florida, Maine, Maryland, Michigan, New Jersey, New York, North Carolina, Ohio, Oregon, and Washington were combined into a single category across states, due to small cell sizes.

- Raking Dimension 3 (voter participation history by sex): Voter participation history was cross-classified by sex. For individuals whose sex was not recorded on the voter file, imputation was applied as follows:

  - Initially, sex was missing for 9.01% of records in the frame. For these records, sex was estimated based on first name and birthdate (where available), and these predictions were used to reduce the proportion of missing data to 0.84%.[14]

  - Among the remaining individuals with unknown sex and whose first name could not be used to predict sex, but who had a middle name that could be classified based on predicted sex, the predicted sex from the middle name was used in forming donor cells to apply the previously described hot deck random imputation method. This step further reduced the proportion of missing data to 0.62%.[15]

  - The remaining individuals with unknown sex had their sex randomly imputed, with donor cells formed based on voter participation history group.

- Raking Dimension 4 (voter participation history by age group): Voter participation history was cross-classified by age group (18–29; 30–39; 40–49; 50–59; 60–69; 70+; and missing). Cells were collapsed as follows:

  - Individuals who voted in neither the 2014 nor 2016 General Election and who had a missing age were combined with individuals who voted in only one of the 2014 or 2016 General Elections and who had a missing age, due to small cell sizes.

Population sizes for Raking Dimensions 1, 2, and 4 and estimated population sizes[16] for Raking Dimension 3 are in Appendix B.

14 In order to validate this step, the same imputation procedures were applied to predict the sex of all members of the sampling frame for whom sex was already known, under the assumption that the frame variable was correct. Of these individuals, 97.6% of females and 97.2% of males were correctly classified based on first name, with high accuracy regardless of birth year.

15 The random imputation method, which took into account the observed distribution of sex among those with the same predicted sex, was applied, rather than using the predicted sex directly, given that known females had higher rates of misclassification based on middle name (13.3%) than did known males (4.4%).

16 As mentioned previously, imputed values were incorporated into the raking totals in order to ensure internally consistent benchmark totals and improve raking convergence. Thus, Raking Dimension 3 consists of estimated totals due to imputation for cases with missing gender.

At the conclusion of the raking step, the FMG Team evaluated the weights to determine whether weight trimming should be implemented. The goal of weight trimming is to reduce the mean square error by trimming extreme weights (Potter, 1993). To evaluate the effects of weight trimming, weights greater than four standard deviations from the mean were trimmed, after which the weights were rescaled via a flat multiplicative adjustment in order to preserve the sum of the weights, and the data were re-raked to population totals. However, this step did not produce any meaningful reduction in weight variation. Therefore, the final calibrated weights before trimming were used.

As previously mentioned, it was possible to remove three units that had been misclassified as being overseas from the control totals and, therefore, to exclude them from the calibration process. However, the remaining ineligible cases represented a unique part of the frame population whose weights could not be redistributed to the other eligibility categories. It was necessary, therefore, to include these cases when adjusting toward control totals, given that they were reflected in the control totals. However, these cases were not included in the analysis data set. In effect, the weighting approach implicitly treats eligible individuals as a subpopulation of the frame population, with calibration adjustments conducted for the full population represented by the frame.

After the conclusion of the weighting process, there were $n = 10{,}965$ eligible respondents receiving weights.

## Computation of Variance Estimates

Variance estimation procedures are developed to characterize the uncertainty in point estimates while accounting for complex sample design features such as stratification, selection of a sample in multiple phases or stages, and survey weighting. The two main methods for variance estimation are Taylor series linearization and replication. Taylor series linearization involves approximating a statistic by applying the Taylor series expansion to the relevant non-linear function, and substituting this approximation into the appropriate variance formula for the given sample design; this method is commonly used in estimating variances for statistics such as means and proportions. Replication methods such as jackknife repeated replication (JRR), balanced repeated replication (BRR), or bootstrap methods are also sometimes used, depending on the complexity of the sample design and type of statistic. Although replication methods can be designed to reflect the impact of multiple steps of weighting adjustments, they also add computational complexity.

In this survey, Taylor series linearization methods were used to estimate variances. Taylor series linearization generally relies on the simplicity associated with estimating the variance for a linear statistic even with a complex sample design and is valid in large samples. In this formulation, the variance strata, primary sampling units (PSU), and survey weights must be defined. For this survey, the variance strata were defined based on the explicit strata used in the sampling process. Specifically, as displayed in Table 4.3 below, the variance strata for the non-longitudinal strata were based on world region and WGI index score category, as specified in the sampling chapter, whereas the longitudinal stratum contained all available individuals who had been eligible respondents in the 2014 OCPS.

| Table 4.3: Variance Strata | | | |
|---|---|---|---|
| Variance Stratum | Portion of Sampling Frame | World Region | WGI Category |
| 1 | Non-Longitudinal | Africa | WGI < 0 |
| 2 | Non-Longitudinal | Africa | 0 ≤ WGI <1 |
| 3 | Non-Longitudinal | East Asia and Pacific | WGI < 0 |
| 4 | Non-Longitudinal | East Asia and Pacific | 0 ≤ WGI <1 |
| 5 | Non-Longitudinal | East Asia and Pacific | 1 ≤ WGI |
| 6 | Non-Longitudinal | Europe and Eurasia | WGI < 0 |
| 7 | Non-Longitudinal | Europe and Eurasia | 0 ≤ WGI <1 |
| 8 | Non-Longitudinal | Europe and Eurasia | 1 ≤ WGI |
| 9 | Non-Longitudinal | Near East | WGI < 0 |
| 10 | Non-Longitudinal | Near East | 0 ≤ WGI <1 |
| 11 | Non-Longitudinal | South and Central Asia | All |
| 12 | Non-Longitudinal | Western Hemisphere—Canada and Mexico | WGI < 0 |
| 13 | Non-Longitudinal | Western Hemisphere—Canada and Mexico | 1 ≤ WGI |
| 14 | Non-Longitudinal | Western Hemisphere—Other | WGI < 0 |
| 15 | Non-Longitudinal | Western Hemisphere—Other | 0 ≤ WGI <1 |
| 16 | Non-Longitudinal | Western Hemisphere—Other | 1 ≤ WGI |
| 17 | Longitudinal | All | All |

## Finite Population Correction

Surveys often include a finite population correction (FPC) in order to give credit for a reduction in sampling variance obtained from sampling from a finite population without replacement. For example, in an extreme scenario, if a census is conducted and there is no nonresponse, then there would be zero sampling error. Although there is some debate on when and whether to apply FPCs (Rust et al., 2006), applying an FPC could lead to underestimates of variance when measurement error is a factor (Kalton, 2002) and might also over-characterize the certainty of estimates in not accounting for variability relating to missing data or to the weighting process. Thus, in order to provide more conservative confidence intervals, an FPC is not applied in this survey.

## Calculation of Outcome Rates

The outcome rates for this survey were computed in accordance with the standards defined by AAPOR (2016). Table 4.4 shows the AAPOR outcome rates obtained; Table 4.5 shows weighted outcome rates by world region; and Table 4.6 shows the frequencies of final disposition codes used to calculate outcome rates. The following section describes what these rates represent and how they were calculated. The base weights developed from the frame and the sample were used for the calculations of the weighted rates to adjust for differences in the probabilities of selection from the frame. Sample members that were determined to be ineligible at the frame level did not have any impact on outcome rates and were therefore excluded from the tables below; note that there were only three such excluded units.

| Table 4.4: AAPOR Outcome Rates | | |
|---|---|---|
| | Unweighted | Weighted |
| Response Rate 3 | 25.19% | 25.34% |
| Contact Rate 2 | 27.80% | 28.08% |
| Cooperation Rate 1 | 90.60% | 90.22% |
| “e” (% eligible among unknowns) | 96.75% | 97.11% |

Note: Weighted rates use the base weight.

| Table 4.5: AAPOR Outcome Rates by World Region | | | | | | | |
|---|---|---|---|---|---|---|---|
| Outcome Rate | Africa | E. Asia & Pacific | Europe and Eurasia | Near East | S. & Cent. Asia | Canada and Mexico | W. Hemisphere (Other) |
| Response Rate 3 | 11.53% | 23.30% | 28.15% | 19.62% | 15.28% | 29.69% | 14.48% |
| Contact Rate 2 | 12.97% | 25.81% | 31.11% | 22.19% | 17.71% | 32.51% | 16.94% |
| Cooperation Rate 1 | 88.93% | 90.27% | 90.47% | 88.40% | 86.32% | 91.33% | 85.46% |
| “e” (% eligible among unknowns) | 93.97% | 97.74% | 96.87% | 97.32% | 92.68% | 97.98% | 95.16% |

Note: Rates above are weighted by the base weight. World region reflects the final corrected frame classifications.

| Table 4.6: AAPOR Final Disposition Code Categories | | | | | |
|---|---|---|---|---|---|
| Final Disposition | Symbol | Sample Count | Sample Percent | Weighted Count | Weighted Percent |
| Eligible respondents | ER | 10,965 | 24.37% | 73,586 | 24.60% |
| Refusals | R | 1,082 | 2.40% | 7,670 | 2.56% |
| Noncontacts | NC | 29 | 0.06% | 188 | 0.06% |
| Other eligible nonrespondents | O | 56 | 0.12% | 309 | 0.10% |
| Unknown eligibility | UNK | 32,458 | 72.13% | 214,914 | 71.85% |
| Ineligible | IN | 407 | 0.90% | 2,436 | 0.81% |
| **Total** | | **44,997** | **100.00%** | **299,104** | **100.00%** |

Note: Sample counts and percentages are unweighted. Weighted counts and percentages use the base weight. Totals may not add up to 100% or displayed total because of rounding. Sampled cases that were identified as ineligible at the frame level had no impact on outcome rate calculations and are thus excluded from the table above.

### Response Rate

The response rate is the number of eligible sample members who returned complete questionnaires divided by the estimated number of eligible individuals in the sample. For this survey, Response Rate 3 (RR3) was calculated. RR3 was chosen to account for sample members whose eligibility could not be determined. The formula for RR3 is:

$$RR3 = \frac{ER}{(ER + R + NC + O + e \cdot UNK)}$$

An important element of RR3 is “e,” the estimated proportion of unknown eligibility cases that are eligible, inclusion of which makes the response rate more accurate.[17] There is no single method to

[17] For all outcome rates, the formula was chosen that incorporated “e” (where applicable). Only complete surveys (i.e., at least 25% of

most accurately calculate "e" across all surveys, given that the proportion of unknown sample members who are eligible depends on design elements of the specific study (Smith, 2009). Thus, the AAPOR standards indicate that researchers should simply use the best available scientific information in calculating "e." One popular method of calculating "e" is the proportional allocation or Council of American Survey Research Organizations (CASRO) method. This method assumes that the ratio of eligible to ineligible cases among the known cases also applies to the unknown cases. This method is easily used and tends to produce conservative estimates (i.e., estimates that do not inflate the response rate).

For purposes of computing "e," using the proportional allocation method for the full sample when some units are determined to be ineligible via procedures applied to the entire sample (or entire frame) can lead to an artificially low estimate for "e" (and, therefore, an artificially high response rate). Thus, "e" was calculated among cases meeting address eligibility criteria (i.e., excluding the three sampled units that had been identified as ineligible at the frame level due to having domestic addresses) as the number of known eligible cases divided by the number of cases with known eligibility (i.e., known eligible and known ineligible cases).

The formula for calculating "e" is:

$$e = \frac{(ER + R + NC + O)}{(ER + R + NC + O + IN)}$$

For this survey, "e" was equal to 97.11% (weighted; 96.75% unweighted), indicating that after removing out-of-scope country addresses, approximately 97.11% of the population represented by the sample can be assumed to be eligible. Therefore, RR3 was equal to 25.34% weighted, 25.19% unweighted.

### Contact Rate

The contact rate represents the proportion of eligible sample members who were actually contacted. This is equal to the number of eligible respondents and eligible nonrespondents who were contacted, divided by the estimated number of eligible individuals in the sample. Contact Rate 2 (CON2) was calculated using the following formula:

$$CON2 = \frac{ER + R + O}{(ER + R + NC + O + e \cdot UNK)}$$

Contact Rate 2 was determined to be 28.08% weighted, 27.80% unweighted.

### Cooperation Rate

The cooperation rate represents the proportion of contacted eligible sample members who agreed to complete the survey. This is equal to the number of eligible respondents who returned complete questionnaires divided by the number of sample members who had been reached. Cooperation Rate 1 (COOP1) was calculated, for which the formula is:

$$COOP1 = \frac{ER}{(ER + R + O)}$$

Cooperation Rate 1 was determined to be 90.22% weighted, 90.60% unweighted.

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the survey completed) were included as eligible respondents (*ER*). Sample members who returned partially completed surveys were slotted into the refusals (*R*) category.

## Design Effect

The design effect is a statistic that indicates the effect of using the selected sampling and weighting methodologies. This statistic demonstrates the impact that the survey design and weighting have on the variance of the point estimates. The design effect is calculated separately for each point estimate. Two pieces of information are necessary to calculate the design effect:

- The variance achieved using the selected design; and
- The variance that would have been achieved using a simple random sampling design.

The design effect is calculated as the ratio of these two pieces of information (Kish, 1965). Holding all else constant, it is desirable for the design effect to be as small as possible. A design effect less than 1 means that the selected design resulted in a smaller variance (and smaller standard error) than would have been achieved with a simple random sample. A design effect greater than 1 means that the selected design resulted in a larger variance (and larger standard error) than would have been achieved using a simple random sample. It is important to note that the design effect is only one measure of the usefulness of a design plan; for instance, budget and feasibility also must factor into design decisions. Likewise, oversampling of small groups to achieve domain precision goals (as was necessary in this study) typically leads to design effects greater than 1. Note that since the variances are unknown, the design effect must be estimated.

Table 4.7 shows the design effects for five key estimates for each portion of the sampling frame (i.e., longitudinal or non-longitudinal portion of the frame, which had been determined based on whether or not a given frame member had been a 2014 OCPS respondent). Table 4.8 shows the design effects for world region subpopulation estimates for the non-longitudinal portion of the sampling frame. For the non-longitudinal portion of the sampling frame (i.e., individuals who had not responded to the 2014 OCPS), the design effects were above 1 because of disproportionate allocation, differential nonresponse, weighting adjustments for nonresponse, and calibration adjustments. For the longitudinal portion of the sampling frame (i.e., individuals who responded to the 2014 OCPS and were sampled with certainty in the 2016 OCPS), the design effects were above 1 because of differential nonresponse, weighting adjustments for nonresponse, and calibration adjustments.

## Table 4.7: Estimated Design Effects

| Question | Non-Longitudinal | Longitudinal |
|---|---|---|
| Voted in 2016 General Election (% voted) [18] | 2.21 | 2.75 |
| Requested Absentee Ballot for 2016 General Election (% yes)[19] | 1.66 | 1.69 |
| Received a ballot for 2016 General Election (% yes)[20] | 1.89 | 2.72 |
| Aware of FVAP (% yes)[21] | 1.49 | 1.49 |
| Interested in 2016 General Election (% very)[22] | 1.83 | 2.15 |

Note: Design effects (DEFF) were computed by treating the non-longitudinal and longitudinal portions of the sampling frame as separate populations (i.e., longitudinal records were excluded from the computation of non-longitudinal record DEFFS, and vice versa), given that sample allocation calculations had focused on the non-longitudinal portion. For questionnaire experiments, design effects are for the control group only. For all metrics, item-missing data and non-substantive answers (e.g., "not sure") are excluded from the denominator.

## Table 4.8: Estimated Design Effects by World Region: Non-Longitudinal Sample Only

| Question | Africa | E. Asia & Pacific | Europe and Eurasia | Near East | S. & Cent. Asia | Canada and Mexico | W. Hemisphere (Other) |
|---|---|---|---|---|---|---|---|
| Voted, 2016 GE | 0.46 | 2.88 | 2.35 | 1.58 | 0.37 | 2.37 | 1.63 |
| Requested Absentee Ballot | 0.25 | 1.83 | 1.69 | 1.50 | 0.33 | 1.76 | 1.55 |
| Received Absentee Ballot | 0.38 | 2.54 | 1.86 | 1.42 | 0.38 | 1.84 | 1.79 |
| Aware of FVAP | 0.34 | 1.95 | 1.48 | 1.16 | 0.33 | 1.44 | 1.39 |
| Interested in 2016 GE | 0.39 | 2.27 | 1.85 | 1.45 | 0.33 | 1.98 | 1.61 |

Note: Design effects (DEFF) were computed by treating the non-longitudinal and longitudinal portions of the sampling frame as separate populations (i.e., longitudinal records were excluded from the computation of non-longitudinal record DEFFS, and vice versa), given that sample allocation calculations had focused on the non-longitudinal portion. For questionnaire experiments, design effects are for the control group only. For all metrics, item-missing data and non-substantive answers (e.g., "not sure") are excluded from the denominator.

18 Question 8 (control group). "Did you vote in the November 8, 2016, General Election?" (Design effect is reported for the proportion of individuals who reported voting.)

19 Question 9 (control group). "Did you request an absentee ballot for the November 8, 2016, General Election?" (Design effect is reported for the proportion of individuals who reported "yes.")

20 Question 10. "Did you receive an absentee ballot from an election official for the November 8, 2016, General Election?" (Design effect is reported for the proportion of individuals who reported "yes.")

21 Question 16. "Before taking this survey, were you aware of the Federal Voting Assistance Program (FVAP) or its services?" (Design effect is reported for the proportion of individuals who reported "yes.")

22 Question 26. "How interested or uninterested were you in the election held on November 8, 2016?" (Design effect is reported for the proportion of individuals who reported being "very interested.")

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# APPENDIX A: COMPARISON OF OVERSEAS CITIZEN POPULATION SURVEY SAMPLE FRAME TO EAVS

This appendix compares the Overseas Citizen Population Survey sampling frame to estimates from a survey of election officials to provide some indication of the how well the sampling frame appears to reflect the population of interest, namely, the *Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA)* civilian population. As described in the sampling chapter, the sampling frame is the basis for survey inferences. Design-based survey inferences can only be made to the sampling frame. One concern with the sampling frame in the present survey is undercoverage (i.e., units of the population that are not included in the frame). A survey frame that suffers from undercoverage of certain populations can result in biased estimates. The impact of undercoverage is affected by factors such as the type of quantity being estimated (e.g., population total, mean, proportion), the relationship between coverage and the quantity of interest, and the method of estimation (which may incorporate weighting adjustments). Under some simplifying assumptions (e.g., all sample members respond to the survey, no measurement error), undercoverage will lead to negative bias for design-weighted estimates of population totals (e.g., estimating the total number of absentee ballot requesters with some given property). For estimating population means or proportions, coverage bias depends on whether and to what extent the reasons for undercoverage are associated with the quantity of interest.

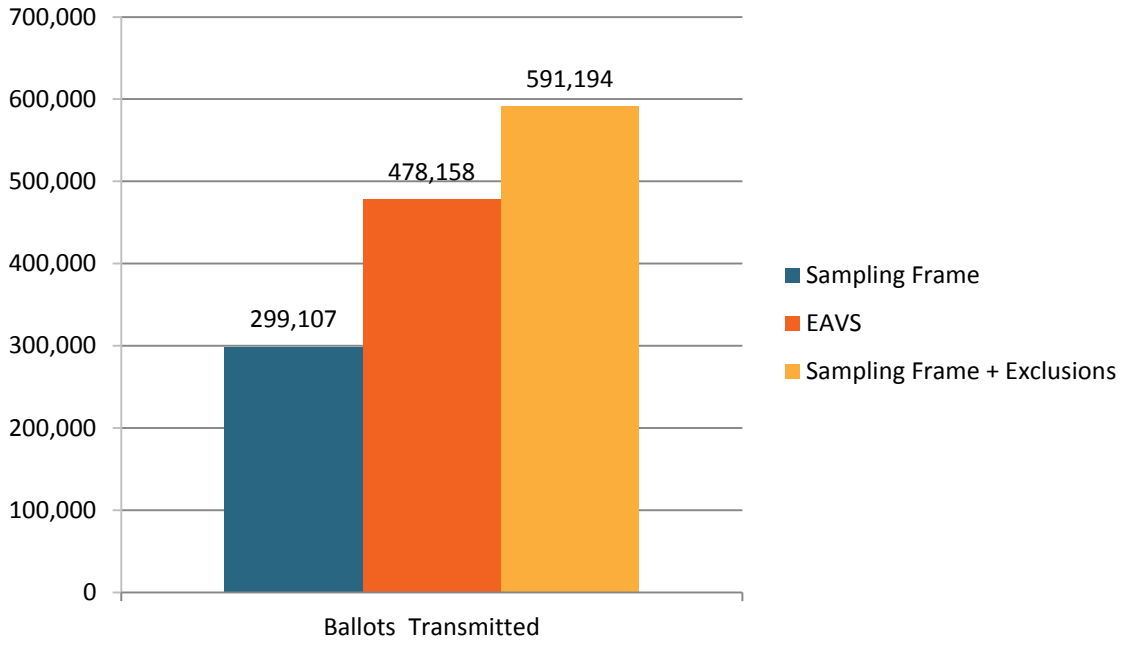
Exclusions of potentially valid records from the final sampling frame were partly due to the absence of a foreign address. This lack of an address not only makes it difficult to survey the individual, but also calls into question whether or not they are actually part of the target *UOCAVA* civilian population. However, it may be the case that the lack of an address is due to inconsistent record-keeping on the part of the jurisdiction, rather than the individual not being part of the population of overseas absentee ballot requesters. Excluding these individuals from the counts would consequently result in invalid conclusions about the number of absentee ballot requesters, and thus an underestimation of the absentee ballot request and voting rates of the *UOCAVA* civilian population. To the degree that absentee ballot requesters with addresses differ systematically (i.e., show undercoverage) from those without addresses with respect to their geography or behaviors of interest, inferences about the absentee ballot requesting subpopulation of overseas *UOCAVA* would also be biased.

To obtain some sense of the possible scope for potential undercoverage bias, in this section the size and distribution of the sampling frame across states is compared to the size and distribution of the overseas ballot requesters implied by the U.S. Election Assistance Commission's (EAC) Election and Voting Administration Survey (EAVS). The EAVS is an attempted census of state and local election officials and collects data on multiple aspects of election administration, including the number of *UOCAVA* ballots transmitted and votes counted, which should be analogous to the number of ballots requested and votes counted in the Aristotle file. The EAVS data have a number of limitation and discrepancies between them, and the frame counts should not be interpreted as necessarily indicating problems with the frame. In particular, it might be the case that state and local election officials imperfectly identify *UOCAVA* voters due to duplicate records, misclassification of Active Duty Military (ADM) *UOCAVA* as civilian *UOCAVA*, etc. However, if there are not systematic differences between the two, then we can have more confidence in both the frame and EAVS data.

Whereas the final sampling frame contains 299,107 records, the total number of ballots transmitted to overseas civilians reported in the EAVS is 478,158. The total number of records including both final frame records and exclusions is 591,194, exceeding the number of *UOCAVA* civilian transmissions reported in the EAVS. To explain the discrepancy we begin by assuming state and local jurisdictions are able to accurately identify *UOCAVA* transmissions. If so, then these

findings can be interpreted as the excluded records that include some valid *UOCAVA* records, but also include a large number of invalid records. However, it is possible that some voting jurisdictions that are not represented in the EAVS *are* represented in the Aristotle file; the EAVS actually underreports the number of *UOCAVA* ballot transmissions.

### Figure A1: Ballots Transmitted, Sampling Frame versus EAVS




To further examine to what degree record exclusions explain the apparent low sampling frame count of absentee ballot requests, the relationship between the exclusion rate in the frame file (defined below) and the discrepancy between the sampling frame and EAVS counts are examined. If records excluded from the frame were represented by record counts reported in the EAVS, then one would expect the exclusion rate of the frame to be related to the discrepancy between the frame and EAVS. Specifically, exclusion rate is defined as:

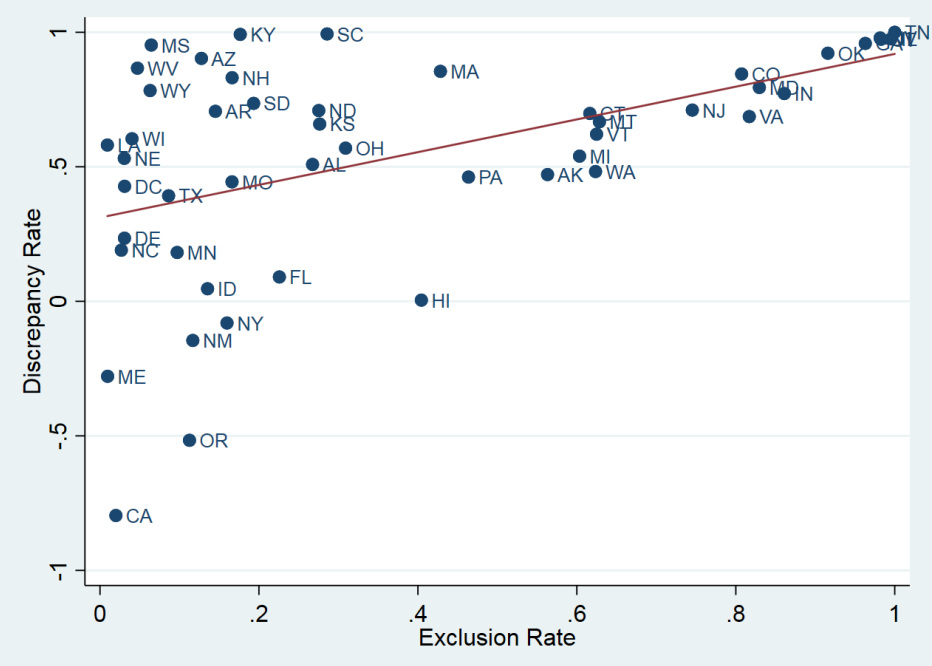
$$Exclusion\ Rate = \frac{Total\ Exclusions}{Total\ Exclusions + Final\ Total\ Frame\ Size}$$

And the discrepancy rate is defined as:

$$Discrepancy\ Rate = \frac{EAVS\ Transmissions - Final\ Total\ Frame\ Size}{EAVS\ Transmissions}$$

If the excluded records explained some of the discrepancy between the ballot transmissions recorded in the Aristotle file and those reported in the EAVS, then we expect the states with more exclusions to also have larger discrepancies. The exclusion and discrepancy rates would thus be positively correlated. The correlation between these two metrics is 0.50 (*R*-squared = 0.25, *N*=49, *p*=<.001). A substantial portion of the variation in the discrepancy rate is thus explained by the exclusion rate. Similar relationship is found when comparing the (logged) counts of exclusions to the size of the discrepancy (*R*-squared = 0.27, *N*=44, *p*=<.001).

## Figure A2: Exclusion versus Discrepancy Rates at the State Level

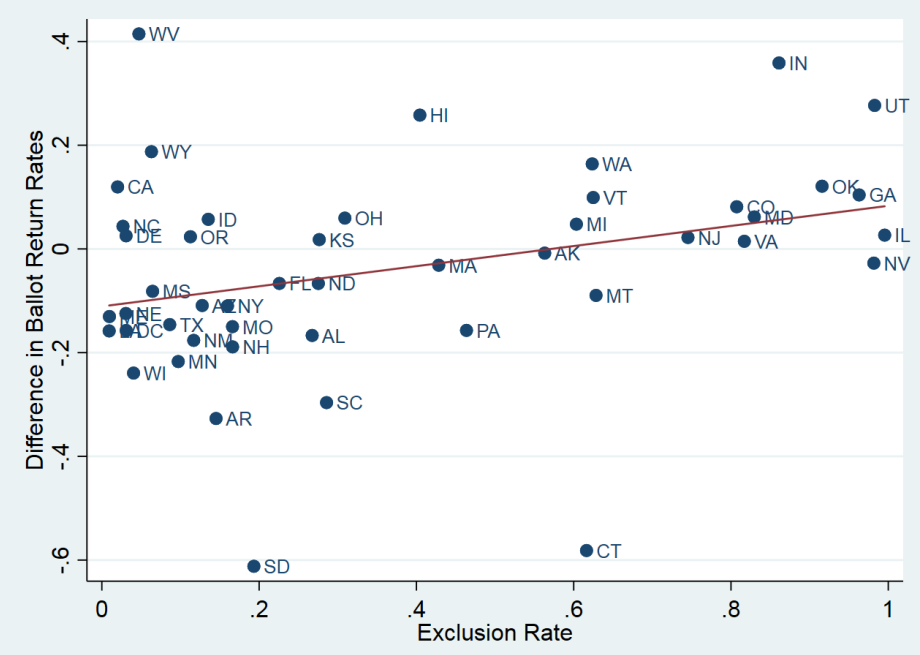



To gain some insight into whether the exclusion of individuals from the frame—although necessary for the purpose in many cases due to a lack of an address—may be biasing inferences concerning the behavior of absentee ballot requesters, the exclusion rate is also compared to the difference in the ballot return rates calculated from the final sampling frame and the EAVS. The ballot return rate is a key outcome variable, and may be correlated with some, but not all, of the outcomes measured in the survey. Specifically, the difference in ballot return rates is defined as:

$$Ballot\ Return\ Rate\ Difference = Ballot\ Return\ Rate_{Frame} - Ballot\ Return\ Rate_{EAVS}$$

The EAVS ballot return rate is calculated using only jurisdiction for which there are data both for ballot requests and ballot returns. The correlation between the difference in ballot return rates and the exclusion rate is a positive 0.32 (*R*-squared = 0.10, *N* = 47, *p* = 0.01). Whereas this relationship is generally weaker than that for the discrepancy and exclusion rates, the results imply that exclusions may be disproportionately concentrated among *UOCAVA* who are less likely to return a ballot. One explanation for this result is that individuals who received their ballot automatically were systematically excluded from the frame. Voters who received a ballot automatically are not necessarily as motivated to vote in the election as those who made an active ballot request for 2016. The EAVS, by contrast, includes all ballot transmissions. Thus, states with lower exclusion rates could have larger numbers of automatic ballot transmissions.

## Figure A3: Exclusion Rates and Discrepancies in Ballot Return Rates




The results of this analysis imply that exclusions of records from the sampling frame may be creating undercoverage bias; systematic discrepancies between the population represented in the sampling frame and the civilian *UOCAVA* ballot requesting population as reported in the EAVS. Whereas we acknowledge that neither the EAVS nor the frame are perfect data sources, discrepancies between the sampling frame and EAVS should be kept in mind when interpreting the results of the analysis reported in Volumes 1 and 3. Again, the EAVS suffers from potential inconsistencies concerning how *UOCAVA* voters are identified across jurisdictions. By contrast, the sampling frame has an absence of important information (i.e. residential address). Both shortcomings are different, but no less important for interpreting the data.

# APPENDIX B: RAKING DIMENSIONS TABLES

**Table B1: Raking Dimension 1: Voter History by Country**

| Voter Participation History (2014–2016) | Country (or Region) | Population Count |
|---|---|---|
| Neither | Australia | 3,754 |
| 2014 or 2016 only | Australia | 8,097 |
| Both | Australia | 1,997 |
| Neither | Brazil | 834 |
| 2014 or 2016 only | Brazil | 1,126 |
| Both | Brazil | 308 |
| Neither | Canada | 8,452 |
| 2014 or 2016 only | Canada | 24,888 |
| Both | Canada | 7,131 |
| Neither | China | 1,798 |
| 2014 and/or 2016 | China | 2,852 |
| Neither | Costa Rica | 678 |
| 2014 or 2016 only | Costa Rica | 946 |
| Both | Costa Rica | 339 |
| Neither | France | 3,257 |
| 2014 or 2016 only | France | 8,930 |
| Both | France | 3,065 |
| Neither | Germany | 3,973 |
| 2014 or 2016 only | Germany | 12,013 |
| Both | Germany | 3,365 |
| Neither | India | 1,481 |
| 2014 or 2016 only | India | 2,046 |
| Both | India | 383 |
| Neither | Ireland | 900 |
| 2014 or 2016 only | Ireland | 2,591 |
| Both | Ireland | 801 |
| Neither | Israel | 5,453 |
| 2014 or 2016 only | Israel | 6,635 |
| Both | Israel | 1,262 |
| Neither | Italy | 2,203 |
| 2014 or 2016 only | Italy | 3,896 |
| Both | Italy | 1,246 |
| Neither | Japan | 1,693 |
| 2014 or 2016 only | Japan | 4,520 |
| Both | Japan | 1,456 |
| Neither | Kenya | 182 |
| 2014 or 2016 only | Kenya | 482 |

| | | |
|---|---|---|
| Both | Kenya | 103 |
| Neither | Mexico | 2,459 |
| 2014 or 2016 only | Mexico | 3,413 |
| Both | Mexico | 995 |
| Neither | Netherlands | 1,502 |
| 2014 or 2016 only | Netherlands | 3,419 |
| Both | Netherlands | 947 |
| Neither | New Zealand | 1,210 |
| 2014 or 2016 only | New Zealand | 2,902 |
| Both | New Zealand | 712 |
| Neither | South Africa | 515 |
| 2014 or 2016 only | South Africa | 890 |
| Both | South Africa | 198 |
| Neither | Spain | 2,074 |
| 2014 or 2016 only | Spain | 4,230 |
| Both | Spain | 1,279 |
| Neither | Sweden | 994 |
| 2014 or 2016 only | Sweden | 2,721 |
| Both | Sweden | 737 |
| Neither | Switzerland | 1,533 |
| 2014 or 2016 only | Switzerland | 4,225 |
| Both | Switzerland | 1,084 |
| Neither | Thailand | 1,196 |
| 2014 or 2016 only | Thailand | 1,763 |
| Both | Thailand | 661 |
| Neither | United Kingdom | 8,143 |
| 2014 or 2016 only | United Kingdom | 24,463 |
| Both | United Kingdom | 5,794 |
| Neither | Africa—Other | 1,222 |
| 2014 or 2016 only | Africa—Other | 1,832 |
| Both | Africa—Other | 685 |
| Neither | East Asia and Pacific—Other | 5,911 |
| 2014 or 2016 only | East Asia and Pacific—Other | 9,874 |
| Both | East Asia and Pacific—Other | 2,361 |
| Neither | Europe and Eurasia—Other | 5,762 |
| 2014 or 2016 only | Europe and Eurasia—Other | 12,169 |
| Both | Europe and Eurasia—Other | 3,729 |
| Neither | Near East—Other | 2,477 |
| 2014 or 2016 only | Near East—Other | 3,639 |
| Both | Near East—Other | 866 |
| Neither | South and Central Asia—Other | 444 |
| 2014 or 2016 only | South and Central Asia—Other | 713 |

| | | |
|---|---|---|
| Both | South and Central Asia—Other | 192 |
| Neither | Western Hemisphere–Far—Other | 6,716 |
| 2014 or 2016 only | Western Hemisphere–Far—Other | 7,276 |
| Both | Western Hemisphere–Far—Other | 2,143 |
| Missing data | Africa | 260 |
| Missing data | East Asia and Pacific | 2,786 |
| Missing data | Europe and Eurasia | 7,555 |
| Missing data | Near East | 968 |
| Missing data | South and Central Asia | 309 |
| Missing data | Western Hemisphere—Close (Canada and Mexico) | 3,090 |
| Missing data | Western Hemisphere—Far | 930 |
| **Total** | | **299,104** |

| Table B2: Raking Dimension 2: Voter History by State | | |
|---|---|---|
| Voter Participation History (2014–2016) | State(s) | Population Count |
| Neither | CA | 25,431 |
| 2014 or 2016 only | CA | 42,267 |
| Both | CA | 9,298 |
| Missing data | CA | 3,512 |
| Less than both | CO | 2,919 |
| Both | CO | 1,223 |
| Neither | FL | 15,007 |
| 2014 or 2016 only | FL | 18,985 |
| Both | FL | 5,332 |
| Less than both | MD | 2,709 |
| Both | MD | 442 |
| Less than both | ME | 3,676 |
| Both | ME | 946 |
| Neither | MI | 919 |
| 2014 or 2016 only | MI | 4,578 |
| Both | MI | 947 |
| Neither | MN | 4,033 |
| 2014 or 2016 only | MN | 4,122 |
| Both | MN | 1,329 |
| Neither | NC | 978 |
| 2014 or 2016 only | NC | 7,231 |
| Both | NC | 2,211 |
| Less than both | NJ | 4,304 |
| Both | NJ | 424 |
| Neither | NY | 6845 |
| 2014 or 2016 only | NY | 26148 |
| Both | NY | 8195 |
| Less than both | OH | 4743 |
| Both | OH | 656 |
| Neither | OR | 1557 |
| 2014 or 2016 only | OR | 5574 |
| Both | OR | 2633 |
| Neither | PA | 3435 |
| 2014 or 2016 only | PA | 4,646 |
| Both | PA | 1,148 |
| Missing data | PA | 1,185 |
| Neither | TX | 3,967 |
| 2014 or 2016 only | TX | 6,488 |
| Both | TX | 1,691 |

| | | |
|---|---|---|
| Missing data | TX | 7,720 |
| Neither | WA | 3,754 |
| 2014 or 2016 only | WA | 10,790 |
| Both | WA | 3,645 |
| Missing data | CO/FL/MD/ME/MI/NC/NJ/NY/OH/OR/WA | 526 |
| Neither | Other states—absentee records | 1,809 |
| 2014 or 2016 only | Other states—absentee records | 9,947 |
| Both | Other states—absentee records | 2,767 |
| Missing data | Other states—absentee records | 2,775 |
| Neither | Other states—unconfirmed requesters | 5,191 |
| 2014 or 2016 only | Other states—unconfirmed requesters | 6,743 |
| Both | Other states—unconfirmed requesters | 1,523 |
| Missing data | Other states—unconfirmed requesters | 180 |
| **Total** | | **299,104** |

| Table B3: Raking Dimension 3: Voter History by Sex | | |
|---|---|---|
| Voter Participation History (2014–2016) | Sex | Population Estimate |
| Neither | Male | 36,110 |
| Neither | Female | 40,706 |
| 2014 or 2016 only | Male | 69,569 |
| 2014 or 2016 only | Female | 92,411 |
| Both | Male | 20,933 |
| Both | Female | 23,477 |
| Missing data | Male | 6,450 |
| Missing data | Female | 9,448 |
| **Total** | | **299,104** |

| Table B4: Raking Dimension 4: Voter History by Age Group | | |
|---|---|---|
| Voter Participation History (2014–2016) | Age Group | Population Count |
| Neither | 18–29 | 17,077 |
| Neither | 30–39 | 15,640 |
| Neither | 40–49 | 13,683 |
| Neither | 50–59 | 11,570 |
| Neither | 60–69 | 9,296 |
| Neither | 70+ | 8,502 |
| 2014 or 2016 only | 18–29 | 35,329 |
| 2014 or 2016 only | 30–39 | 33,473 |
| 2014 or 2016 only | 40–49 | 29,264 |
| 2014 or 2016 only | 50–59 | 25,895 |
| 2014 or 2016 only | 60–69 | 21,541 |
| 2014 or 2016 only | 70+ | 14,077 |
| Neither, 2014 only, or 2016 only | Missing data | 3,449 |
| Both | 18–29 | 6,717 |
| Both | 30–39 | 6,262 |
| Both | 40–49 | 6,062 |
| Both | 50–59 | 7,602 |
| Both | 60–69 | 9,181 |
| Both | 70+ | 8,181 |
| Both | Missing data | 405 |
| Missing data | 18–29 | 2,270 |
| Missing data | 30–39 | 2,509 |
| Missing data | 40–49 | 2,272 |
| Missing data | 50–59 | 1,932 |
| Missing data | 60–69 | 1,681 |
| Missing data | 70+ | 1,013 |
| Missing data | Missing data | 4,221 |
| **Total** | | **299,104** |

2016 Overseas Citizen Population Analysis

# SURVEY TOPLINE REPORT

***Volume 3***

## TABULATION OF SURVEY RESULTS

The 2016 Overseas Citizen Population Survey (OCPS) was distributed to 45,000 overseas citizens who requested an absentee ballot for the 2016 General Election. Conducted as a part of the Federal Voting Assistance Program's (FVAP) analysis of the overseas citizen voting process, the OCPS asked respondents questions about (1) the country in which they were located, (2) the length of time they had resided outside of the United States, (3) their absentee voting experiences and behaviors leading up to the 2016 General Election, and (4) other relevant demographic information. Results for key survey items are reported in this volume, broken down by demographic subpopulations based on age, sex, income, race, education, and marital status. Sample sizes (*N*) are included for each question and footnotes indicate where skip logic occurred.

FVAP collected data from U.S. citizens located overseas through the OCPS, a web-only survey of a sample of registered civilians who requested a ballot to an overseas address for the 2016 General Election. This survey was used by FVAP to collect specific, accurate information on voting-relevant demographic variables (such as age, gender, race/ethnicity, education, and mobility) to make the comparisons between the overseas, domestic, and active duty military (ADM) populations that are important to FVAP's mission. The OCPS provides important information on voting-related behaviors that can help FVAP better understand one of the populations it serves and explain different patterns in *Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA)* voting observed across and within other countries. The survey instrument was designed to parallel FVAP's Post-Election Voting Survey of ADM (PEVS-ADM) and the Census Bureau's Current Population Survey (CPS), facilitating FVAP's ability to compare the registration and voting behavior of the overseas U.S. civilian population, domestic CVAP, and ADM. Table 3.1 provides a summary of the 2016 OCPS sample allocation, communications plan, and mailing dates.

| | 11/9/2017 | 11/22/2017 | 12/7/2017 | | 12/28/2017 | 1/11/2018 | 1/25/2018 | | 2/8/2018 | 2/22/2018 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Control, No Email (*N*=32,400)** | Invitation | Reminder 1: Letter | Reminder 2: Letter | CUT FILE | Reminder 3: Postcard | Reminder 4: Postcard | Reminder 5: Postcard | CUT FILE | Reminder 6: Postcard | Reminder 7: Domestic Postcard |
| **Control, Email (*N*=8,100)** | Invitation | Reminder 1: Email | Reminder 2: Letter | | Reminder 3: Email | Reminder 4: Postcard | Reminder 5: Postcard | | Reminder 6: Postcard | Reminder 7: Domestic Postcard |
| **Treatment, No Email (*N*=3,600)** | Invitation | Reminder 1: Letter | Reminder 2: Letter | | Reminder 3: Postcard | Reminder 4: Postcard | Reminder 5: Postcard | | Reminder 6: Postcard | Reminder 7: Domestic Postcard |
| **Treatment, Email (*N*=900)** | Invitation | Reminder 1: Email | Reminder 2: Letter | | Reminder 3: Email | Reminder 4: Postcard | Reminder 5: Postcard | | Reminder 6: Postcard | Reminder 7: Domestic Postcard |

The survey was administered to a sample of 45,000 respondents. Respondents were sent one of two instruments: 40,500 received a "control" instrument and 4,500 received a "treatment" instrument. The instrument conditions differed only with respect to questions concerning respondent's voting behaviors. The control attempted to avoid use of "double barreled" question; that is, questions that simultaneously ask about whether the respondent participated in a given behavior (e.g., having voted) and how they did so (e.g., in person, by mail). Instead, two separate questions would be asked in the control. This decision had implications for item and potentially survey response. However, this led to different questions than in the 2014 OCPS and other FVAP surveys with implications for comparability. Consequently, a smaller sample of respondents was given an alternative survey with more traditional wording that was potentially more comparable to

previous surveys. Treatment and control instruments are presented at the end of this document, and the procedure by which respondents were allocated to treatments is discussed in Volume 2 of this report. Both instruments were in English only.[1]

The OCPS used a mixed-mode approach in which respondents received an initial mail contact directing them to a website where they could complete an online survey. Respondents who did not respond to the online survey were then sent up to seven reminders, including a postcard sent to the individual's domestic address on file. This was done to increase the overall response rate by including responses from some individuals who were residing overseas during the 2016 General Election but had since returned to the United States. Reminder communications were sent approximately every two weeks. Respondents who had already completed the survey or who indicated they needed to be removed from the mailing list were cut from the mailing file before the third and sixth reminders were mailed.

Of the total sample of 45,000 individuals, 9,000 or 20% had a valid email address on file. For this subset of the sample, two email reminders replaced two of the international mail reminders. Email communications used similar wording and design choices as their corresponding mail reminders. This mixed-mode design[2] has significant benefits over soliciting potential respondents by email. It ensures that all registered U.S. civilians living overseas have a known probability of being contacted and having the potential to participate, rather than just those with a listed email address. As a result, this increased the likelihood that the final sample of respondents would be more representative of this population with respect to internet use/access. In addition, costs can be high for printing and mailing paper surveys, especially to an international population; pushing respondents to complete an online survey lowered costs while still capturing a representative sample of the overseas citizen population.[3]

Because the survey frame did not include email addresses for all overseas registered voters, the post-survey analysis appropriately weighted the email and non-email samples to control for potential error introduced by this two-pronged approach. Using all means of contact available helped mitigate the effects of uncertain overseas mail delivery and other obstacles from trying to contact a population that is historically difficult to survey.

[1] Because the instrument was only available in English, all respondents were likely to be at least somewhat English-proficient. Differences in survey measures between English-proficient and limited-English-proficiency overseas absentee ballot requesters after controlling for the variables used in computing weighting adjustments could have resulted in uncorrected nonresponse bias. The magnitude of this possible bias was expected to be affected by the proportion of overseas absentee ballot requesters who were not English-proficient, the magnitude of differences between English-proficient and limited-English proficiency individuals, and the extent to which differences between these two groups were not explained by other characteristics accounted for in the weighting strategy.

[2] Lonna Rae Atkeson, Alex N. Adams, and R. Michael Alvarez, Nonresponse and mode effects in self- and interviewer-administered surveys, Political Analysis, published online May 28, 2014, doi: 10.1093/pan/mpt049.

[3] Approximately 84% of participants in the 2014 OCPS completed their survey online and there were minimal differences in responses between modes.

**Respondent Demographics.** This table provides a breakdown of survey respondents by world region and key demographics. [*N* = 10,965]

| Key Characteristics by World Region | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Overall | Africa | East Asia and Pacific | Europe | Near East | South-Central Asia | Western Hemisphere |
| Respondents | 100% | 2% | 19% | 46% | 7% | 2% | 24% |
| **Age** | | | | | | | |
| Age 18 to 24 | 11% | 9% | 9% | 12% | 13% | 14% | 9% |
| Age 25 to 34 | 21% | 27% | 23% | 22% | 18% | 11% | 16% |
| Age 35 to 44 | 19% | 19% | 20% | 20% | 19% | 27% | 14% |
| Age 45 to 54 | 17% | 16% | 18% | 18% | 15% | 26% | 15% |
| Age 55 to 64 | 15% | 16% | 16% | 13% | 16% | 11% | 18% |
| Age 65 and up | 18% | 13% | 14% | 14% | 19% | 11% | 28% |
| **Sex** | | | | | | | |
| Male | 44% | 41% | 49% | 40% | 51% | 54% | 46% |
| Female | 56% | 59% | 51% | 60% | 49% | 46% | 54% |
| **Income** | | | | | | | |
| $0–$19,999 | 16% | 27% | 11% | 16% | 22% | 22% | 15% |
| $20,000–$74,999 | 40% | 45% | 39% | 42% | 41% | 42% | 37% |
| $75,000+ | 44% | 28% | 50% | 42% | 37% | 35% | 48% |
| **Race** | | | | | | | |
| White | 79% | 80% | 69% | 87% | 91% | 22% | 73% |
| Black | 2% | 10% | 1% | 1% | 2% | 0% | 3% |
| Hispanic | 8% | 4% | 3% | 6% | 3% | 1% | 18% |
| Other Race | 11% | 5% | 27% | 6% | 5% | 77% | 6% |
| **Education** | | | | | | | |
| Less Than Bachelor's | 21% | 12% | 15% | 20% | 22% | 10% | 27% |
| Bachelor's Degree | 34% | 37% | 41% | 32% | 29% | 35% | 32% |
| More Than Bachelor's | 46% | 51% | 44% | 48% | 50% | 55% | 40% |
| **Marital Status** | | | | | | | |
| Married | 60% | 54% | 58% | 58% | 66% | 69% | 64% |
| Divorced/Widowed | 11% | 11% | 10% | 10% | 11% | 8% | 13% |
| Never Married | 29% | 35% | 32% | 31% | 23% | 23% | 23% |

**Q7.** What was the *primary reason* that you were in [COUNTRY] on November 8, 2016? Was it because you, a partner, and/or a family member…? (1) Could be with Family/Citizen of Country (2) Could Retire (3) Could Go To School (4) Employment (5) Missionary/Volunteer Activities (6) Other Reason [*N* = 10,586]

| Reason for Being Outside the United States | | | | | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Respondents | 40% | 5% | 5% | 25% | 5% | 20% |
| **Age** | | | | | | |
| Age 18 to 24 | 64% | 0% | 20% | 8% | 3% | 5% |
| Age 25 to 34 | 38% | 0% | 11% | 32% | 4% | 15% |
| Age 35 to 44 | 36% | 0% | 2% | 37% | 5% | 20% |
| Age 45 to 54 | 38% | 0% | 1% | 33% | 5% | 23% |
| Age 55 to 64 | 35% | 8% | 0% | 24% | 6% | 26% |
| Age 65 and up | 37% | 23% | 0% | 9% | 5% | 26% |
| **Sex** | | | | | | |
| Male | 37% | 7% | 6% | 28% | 5% | 18% |
| Female | 43% | 4% | 4% | 23% | 5% | 21% |
| **Region** | | | | | | |
| Africa | 15% | 3% | 2% | 27% | 39% | 14% |
| East Asia and Pacific | 30% | 6% | 3% | 40% | 6% | 15% |
| Europe | 41% | 3% | 7% | 24% | 3% | 23% |
| Near East | 48% | 3% | 3% | 22% | 8% | 16% |
| South-Central Asia | 48% | 5% | 3% | 25% | 6% | 13% |
| Western Hemisphere | 45% | 10% | 5% | 17% | 3% | 20% |
| **Income** | | | | | | |
| $0–$19,999 | 46% | 7% | 16% | 8% | 7% | 15% |
| $20,000–$74,999 | 40% | 7% | 5% | 19% | 7% | 22% |
| $75,000+ | 37% | 3% | 1% | 38% | 1% | 19% |
| **Race** | | | | | | |
| White | 40% | 5% | 5% | 24% | 5% | 21% |
| Black | 35% | 6% | 1% | 31% | 2% | 25% |
| Hispanic | 47% | 8% | 6% | 20% | 3% | 16% |
| Other Race | 36% | 4% | 7% | 34% | 3% | 16% |
| **Education** | | | | | | |
| Less Than Bachelor's | 56% | 9% | 6% | 7% | 3% | 18% |
| Bachelor's Degree | 39% | 4% | 5% | 26% | 6% | 20% |
| More Than Bachelor's | 34% | 4% | 5% | 32% | 4% | 21% |
| **Marital Status** | | | | | | |
| Married | 39% | 6% | 1% | 27% | 5% | 22% |
| Divorced/Widowed | 39% | 13% | 1% | 17% | 1% | 28% |
| Never Married | 43% | 1% | 14% | 24% | 5% | 12% |

**Q8.** Did you vote in the November 8, 2016, General Election? [*N* = 9,800]

| | Voted | | |
|---|---|---|---|
| | Yes, definitely voted | No, definitely did not vote | Not sure if I voted |
| Respondents | 83% | 14% | 3% |
| **Age** | | | |
| Age 18 to 24 | 78% | 17% | 5% |
| Age 25 to 34 | 84% | 13% | 3% |
| Age 35 to 44 | 84% | 14% | 3% |
| Age 45 to 54 | 85% | 13% | 2% |
| Age 55 to 64 | 86% | 13% | 2% |
| Age 65 and up | 82% | 14% | 4% |
| **Sex** | | | |
| Male | 82% | 15% | 3% |
| Female | 85% | 12% | 3% |
| **Region** | | | |
| Africa | 83% | 14% | 3% |
| East Asia and Pacific | 79% | 17% | 4% |
| Europe | 88% | 10% | 2% |
| Near East | 74% | 22% | 4% |
| South-Central Asia | 72% | 20% | 8% |
| Western Hemisphere | 82% | 15% | 3% |
| **Income** | | | |
| $0–$19,999 | 75% | 18% | 7% |
| $20,000–$74,999 | 82% | 15% | 3% |
| $75,000+ | 87% | 12% | 2% |
| **Race** | | | |
| White | 85% | 13% | 2% |
| Black | 85% | 11% | 4% |
| Hispanic | 74% | 21% | 4% |
| Other Race | 77% | 17% | 6% |
| **Education** | | | |
| Less Than Bachelor's | 80% | 17% | 4% |
| Bachelor's Degree | 83% | 14% | 3% |
| More Than Bachelor's | 85% | 12% | 2% |
| **Marital Status** | | | |
| Married | 85% | 13% | 2% |
| Divorced/Widowed | 80% | 17% | 4% |
| Never Married | 82% | 14% | 4% |

**Q9.** Did you request an absentee ballot for the November 8, 2016, General Election? [*N* = 9,765]

| | Absentee Ballot Request | | |
|---|---|---|---|
| | Yes | No | Not sure |
| Respondents | 87% | 7% | 5% |
| **Age** | | | |
| Age 18 to 24 | 86% | 7% | 7% |
| Age 25 to 34 | 92% | 4% | 4% |
| Age 35 to 44 | 90% | 5% | 5% |
| Age 45 to 54 | 86% | 8% | 6% |
| Age 55 to 64 | 86% | 9% | 5% |
| Age 65 and up | 82% | 12% | 6% |
| **Sex** | | | |
| Male | 86% | 9% | 5% |
| Female | 88% | 6% | 6% |
| **Region** | | | |
| Africa | 93% | 4% | 3% |
| East Asia and Pacific | 87% | 6% | 7% |
| Europe | 89% | 6% | 5% |
| Near East | 83% | 9% | 8% |
| South-Central Asia | 88% | 5% | 6% |
| Western Hemisphere | 86% | 10% | 4% |
| **Income** | | | |
| $0–$19,999 | 84% | 9% | 6% |
| $20,000–$74,999 | 87% | 7% | 6% |
| $75,000+ | 89% | 7% | 4% |
| **Race** | | | |
| White | 88% | 7% | 5% |
| Black | 83% | 10% | 7% |
| Hispanic | 87% | 9% | 3% |
| Other Race | 86% | 6% | 8% |
| **Education** | | | |
| Less Than Bachelor's | 82% | 11% | 8% |
| Bachelor's Degree | 88% | 7% | 5% |
| More Than Bachelor's | 90% | 6% | 4% |
| **Marital Status** | | | |
| Married | 88% | 7% | 5% |
| Divorced/Widowed | 85% | 9% | 6% |
| Never Married | 87% | 7% | 6% |

**Q9A.** Did you expect to receive an absentee ballot automatically from an election official for the November 8, 2016, General Election? [*N* = 10,909]

| | Automatic Ballot | | |
|---|---|---|---|
| | Yes | No | Not sure |
| Respondents | 47% | 40% | 13% |
| **Age** | | | |
| Age 18 to 24 | 42% | 43% | 15% |
| Age 25 to 34 | 40% | 45% | 15% |
| Age 35 to 44 | 42% | 43% | 14% |
| Age 45 to 54 | 50% | 39% | 12% |
| Age 55 to 64 | 53% | 35% | 11% |
| Age 65 and up | 58% | 31% | 11% |
| **Sex** | | | |
| Male | 49% | 38% | 13% |
| Female | 45% | 42% | 13% |
| **Region** | | | |
| Africa | 46% | 43% | 11% |
| East Asia and Pacific | 48% | 39% | 12% |
| Europe | 45% | 41% | 14% |
| Near East | 45% | 38% | 17% |
| South-Central Asia | 50% | 35% | 15% |
| Western Hemisphere | 49% | 39% | 12% |
| **Income** | | | |
| $0–$19,999 | 50% | 38% | 13% |
| $20,000–$74,999 | 48% | 39% | 13% |
| $75,000+ | 45% | 42% | 13% |
| **Race** | | | |
| White | 45% | 42% | 13% |
| Black | 53% | 37% | 10% |
| Hispanic | 54% | 33% | 13% |
| Other Race | 51% | 33% | 16% |
| **Education** | | | |
| Less Than Bachelor's | 52% | 37% | 12% |
| Bachelor's Degree | 46% | 40% | 14% |
| More Than Bachelor's | 45% | 42% | 13% |
| **Marital Status** | | | |
| Married | 47% | 40% | 13% |
| Divorced/Widowed | 54% | 32% | 14% |
| Never Married | 43% | 43% | 14% |

**Q9B**. How did you request an absentee ballot for the November 8, 2016, General Election? [*N* = 9,250]

| Absentee Ballot Request Mode[4] | | | | | |
|---|---|---|---|---|---|
| | Mail | Email | Website | Fax | I'm unsure how I submitted an absentee ballot request. |
| Respondents | 16% | 27% | 41% | 1% | 15% |
| **Age** | | | | | |
| Age 18 to 24 | 14% | 26% | 44% | 1% | 15% |
| Age 25 to 34 | 12% | 25% | 51% | 1% | 12% |
| Age 35 to 44 | 13% | 24% | 47% | 1% | 16% |
| Age 45 to 54 | 16% | 27% | 40% | 1% | 15% |
| Age 55 to 64 | 19% | 31% | 33% | 1% | 17% |
| Age 65 and up | 24% | 33% | 24% | 1% | 19% |
| **Sex** | | | | | |
| Male | 17% | 28% | 39% | 1% | 15% |
| Female | 15% | 27% | 42% | 1% | 16% |
| **Region** | | | | | |
| Africa | 17% | 36% | 36% | 1% | 10% |
| East Asia and Pacific | 14% | 25% | 44% | 1% | 15% |
| Europe | 15% | 27% | 43% | 0% | 15% |
| Near East | 16% | 26% | 40% | 0% | 18% |
| South-Central Asia | 14% | 27% | 42% | 1% | 16% |
| Western Hemisphere | 19% | 30% | 33% | 1% | 16% |
| **Income** | | | | | |
| $0–$19,999 | 18% | 26% | 41% | 0% | 14% |
| $20,000–$74,999 | 16% | 26% | 42% | 1% | 16% |
| $75,000+ | 15% | 29% | 41% | 1% | 15% |
| **Race** | | | | | |
| White | 16% | 28% | 40% | 1% | 16% |
| Black | 28% | 37% | 27% | 0% | 9% |
| Hispanic | 17% | 28% | 43% | 1% | 11% |
| Other Race | 13% | 22% | 48% | 1% | 16% |
| **Education** | | | | | |
| Less Than Bachelor's | 20% | 28% | 37% | 1% | 14% |
| Bachelor's Degree | 15% | 26% | 43% | 1% | 15% |
| More Than Bachelor's | 15% | 28% | 40% | 1% | 16% |
| **Marital Status** | | | | | |
| Married | 16% | 28% | 39% | 1% | 15% |
| Divorced/Widowed | 17% | 28% | 38% | 1% | 17% |
| Never Married | 14% | 25% | 46% | 1% | 15% |

[4] This question was shown to respondents who answered "yes" to whether they requested an absentee ballot for the November 8, 2016, General Election (Q9).

**9C.** Was this the first time you requested an absentee ballot while living in [COUNTRY]? [*N* = 9,250][5]

| | Absentee Ballot Request Experience | |
|---|---|---|
| | Yes | No |
| Respondents | 44% | 56% |
| **Age** | | |
| Age 18 to 24 | 85% | 15% |
| Age 25 to 34 | 61% | 39% |
| Age 35 to 44 | 44% | 56% |
| Age 45 to 54 | 32% | 68% |
| Age 55 to 64 | 30% | 70% |
| Age 65 and up | 25% | 75% |
| **Sex** | | |
| Male | 44% | 56% |
| Female | 44% | 56% |
| **Region** | | |
| Africa | 58% | 42% |
| East Asia and Pacific | 48% | 52% |
| Europe | 42% | 58% |
| Near East | 45% | 55% |
| South-Central Asia | 63% | 37% |
| Western Hemisphere | 45% | 55% |
| **Income** | | |
| $0–$19,999 | 62% | 38% |
| $20,000–$74,999 | 43% | 57% |
| $75,000+ | 41% | 59% |
| **Race** | | |
| White | 42% | 58% |
| Black | 48% | 52% |
| Hispanic | 63% | 37% |
| Other Race | 56% | 44% |
| **Education** | | |
| Less Than Bachelor's | 57% | 43% |
| Bachelor's Degree | 46% | 54% |
| More Than Bachelor's | 38% | 62% |
| **Marital Status** | | |
| Married | 37% | 63% |
| Divorced/Widowed | 35% | 65% |
| Never Married | 65% | 35% |

[5] This question was shown to respondents who answered "yes" to whether they requested an absentee ballot for the November 8, 2016, General Election (Q9).

**Q10.** Did you receive an absentee ballot from an election official for the November 8, 2016, election? [*N* = 10,907]

| Absentee Ballot Receipt | | | |
|---|---|---|---|
| | Yes | No | Not sure |
| Respondents | 77% | 11% | 12% |
| **Age** | | | |
| Age 18 to 24 | 69% | 13% | 17% |
| Age 25 to 34 | 76% | 10% | 14% |
| Age 35 to 44 | 79% | 9% | 12% |
| Age 45 to 54 | 78% | 10% | 12% |
| Age 55 to 64 | 80% | 11% | 10% |
| Age 65 and up | 79% | 12% | 9% |
| **Sex** | | | |
| Male | 78% | 11% | 11% |
| Female | 77% | 11% | 13% |
| **Region** | | | |
| Africa | 79% | 11% | 9% |
| East Asia and Pacific | 77% | 11% | 12% |
| Europe | 78% | 10% | 13% |
| Near East | 70% | 14% | 16% |
| South-Central Asia | 75% | 13% | 12% |
| Western Hemisphere | 79% | 11% | 10% |
| **Income** | | | |
| $0–$19,999 | 70% | 14% | 16% |
| $20,000–$74,999 | 77% | 11% | 11% |
| $75,000+ | 80% | 9% | 11% |
| **Race** | | | |
| White | 79% | 10% | 11% |
| Black | 75% | 11% | 14% |
| Hispanic | 70% | 16% | 14% |
| Other Race | 73% | 12% | 15% |
| **Education** | | | |
| Less Than Bachelor's | 72% | 12% | 15% |
| Bachelor's Degree | 76% | 12% | 13% |
| More Than Bachelor's | 81% | 10% | 10% |
| **Marital Status** | | | |
| Married | 80% | 10% | 10% |
| Divorced/Widowed | 76% | 12% | 11% |
| Never Married | 73% | 12% | 15% |

**Q10A.** Did you obtain a Federal Write-In Absentee Ballot (FWAB) for the November 8, 2016, election? [*N* = 10,869]

| | FWAB Receipt | | |
|---|---|---|---|
| | Yes | No | Not sure |
| Respondents | 36% | 21% | 43% |
| **Age** | | | |
| Age 18 to 24 | 39% | 14% | 47% |
| Age 25 to 34 | 35% | 15% | 50% |
| Age 35 to 44 | 35% | 18% | 47% |
| Age 45 to 54 | 37% | 22% | 41% |
| Age 55 to 64 | 37% | 25% | 38% |
| Age 65 and up | 37% | 28% | 35% |
| **Sex** | | | |
| Male | 34% | 23% | 43% |
| Female | 38% | 19% | 43% |
| **Region** | | | |
| Africa | 42% | 21% | 36% |
| East Asia and Pacific | 36% | 22% | 42% |
| Europe | 35% | 20% | 45% |
| Near East | 39% | 21% | 39% |
| South-Central Asia | 43% | 18% | 39% |
| Western Hemisphere | 37% | 21% | 42% |
| **Income** | | | |
| $0–$19,999 | 39% | 17% | 44% |
| $20,000–$74,999 | 38% | 21% | 41% |
| $75,000+ | 35% | 22% | 43% |
| **Race** | | | |
| White | 35% | 21% | 44% |
| Black | 46% | 11% | 43% |
| Hispanic | 41% | 22% | 37% |
| Other Race | 38% | 19% | 43% |
| **Education** | | | |
| Less Than Bachelor's | 41% | 19% | 40% |
| Bachelor's Degree | 36% | 20% | 44% |
| More Than Bachelor's | 34% | 22% | 44% |
| **Marital Status** | | | |
| Married | 36% | 21% | 42% |
| Divorced/Widowed | 41% | 23% | 36% |
| Never Married | 35% | 18% | 47% |

**Q10B.** How did you receive your absentee ballot or obtain a Federal Write-In Absentee Ballot (FWAB) for the November 8, 2016, General Election? [*N* = 8,453][6]

| Absentee Ballot Receipt Mode | | | | | |
|---|---|---|---|---|---|
| | Mail | Email | Website | Fax | I'm unsure how I received an absentee ballot. |
| Respondents | 55% | 31% | 7% | 0% | 7% |
| **Age** | | | | | |
| Age 18 to 24 | 51% | 35% | 8% | 0% | 7% |
| Age 25 to 34 | 47% | 37% | 10% | 0% | 6% |
| Age 35 to 44 | 55% | 31% | 7% | 0% | 7% |
| Age 45 to 54 | 56% | 30% | 7% | 0% | 6% |
| Age 55 to 64 | 58% | 29% | 7% | 0% | 6% |
| Age 65 and up | 63% | 24% | 5% | 0% | 8% |
| **Sex** | | | | | |
| Male | 56% | 29% | 8% | 0% | 7% |
| Female | 54% | 33% | 7% | 0% | 7% |
| **Region** | | | | | |
| Africa | 33% | 56% | 6% | 0% | 5% |
| East Asia and Pacific | 54% | 30% | 9% | 0% | 6% |
| Europe | 57% | 29% | 7% | 0% | 6% |
| Near East | 54% | 30% | 6% | 0% | 11% |
| South-Central Asia | 49% | 35% | 8% | 0% | 8% |
| Western Hemisphere | 52% | 34% | 7% | 0% | 7% |
| **Income** | | | | | |
| $0–$19,999 | 54% | 32% | 9% | 0% | 5% |
| $20,000–$74,999 | 55% | 30% | 7% | 0% | 8% |
| $75,000+ | 53% | 33% | 8% | 0% | 6% |
| **Race** | | | | | |
| White | 55% | 31% | 7% | 0% | 7% |
| Black | 62% | 34% | 2% | 0% | 3% |
| Hispanic | 55% | 32% | 7% | 1% | 6% |
| Other Race | 53% | 30% | 9% | 0% | 8% |
| **Education** | | | | | |
| Less Than Bachelor's | 63% | 25% | 6% | 0% | 6% |
| Bachelor's Degree | 52% | 33% | 8% | 0% | 7% |
| More Than Bachelor's | 53% | 32% | 7% | 0% | 7% |
| **Marital Status** | | | | | |
| Married | 56% | 30% | 7% | 0% | 7% |
| Divorced/Widowed | 58% | 28% | 7% | 0% | 7% |
| Never Married | 50% | 34% | 8% | 0% | 7% |

[6] This question was shown to respondents who answered "yes" to either receiving an absentee ballot from an election official or obtaining a FWAB for the November 8, 2016, General Election (Q10, Q10A).

**Q11.** Did you complete and return an absentee ballot for the November 8, 2016, election? [*N* = 9,459][7]

| | Absentee Ballot Submit | | |
|---|---|---|---|
| | Yes | No | Not sure |
| Respondents | 91% | 7% | 2% |
| **Age** | | | |
| Age 18 to 24 | 85% | 12% | 4% |
| Age 25 to 34 | 90% | 8% | 2% |
| Age 35 to 44 | 90% | 8% | 2% |
| Age 45 to 54 | 93% | 6% | 1% |
| Age 55 to 64 | 92% | 6% | 2% |
| Age 65 and up | 91% | 8% | 1% |
| **Sex** | | | |
| Male | 90% | 8% | 2% |
| Female | 91% | 7% | 1% |
| **Region** | | | |
| Africa | 91% | 8% | 1% |
| East Asia and Pacific | 87% | 12% | 2% |
| Europe | 94% | 5% | 2% |
| Near East | 84% | 10% | 6% |
| South-Central Asia | 85% | 12% | 3% |
| Western Hemisphere | 90% | 8% | 1% |
| **Income** | | | |
| $0–$19,999 | 85% | 12% | 3% |
| $20,000–$74,999 | 90% | 8% | 2% |
| $75,000+ | 93% | 6% | 1% |
| **Race** | | | |
| White | 91% | 7% | 2% |
| Black | 94% | 4% | 2% |
| Hispanic | 87% | 11% | 2% |
| Other Race | 87% | 11% | 3% |
| **Education** | | | |
| Less Than Bachelor's | 86% | 11% | 2% |
| Bachelor's Degree | 92% | 7% | 2% |
| More Than Bachelor's | 92% | 6% | 2% |
| **Marital Status** | | | |
| Married | 92% | 6% | 2% |
| Divorced/Widowed | 90% | 9% | 1% |
| Never Married | 88% | 9% | 3% |

[7] This question was shown to respondents who answered "yes" to either receiving an absentee ballot from an election official or obtaining a FWAB for the November 8, 2016, General Election (Q10, Q10A).

**Q11A.** How did you return your absentee ballot or Federal Write-In Absentee Ballot (FWAB) for the November 8, 2016, General Election? [*N* = 7,956][8]

| Absentee Ballot Submit Mode | | | | | |
|---|---|---|---|---|---|
| | Mail | Email | Website | Fax | I'm unsure how I submitted an absentee ballot. |
| Respondents | 71% | 15% | 2% | 6% | 5% |
| **Age** | | | | | |
| Age 18 to 24 | 69% | 15% | 1% | 9% | 6% |
| Age 25 to 34 | 67% | 19% | 3% | 7% | 4% |
| Age 35 to 44 | 71% | 17% | 2% | 5% | 4% |
| Age 45 to 54 | 71% | 14% | 2% | 8% | 5% |
| Age 55 to 64 | 75% | 12% | 2% | 6% | 5% |
| Age 65 and up | 77% | 12% | 1% | 4% | 6% |
| **Sex** | | | | | |
| Male | 71% | 15% | 2% | 7% | 5% |
| Female | 72% | 16% | 2% | 6% | 5% |
| **Region** | | | | | |
| Africa | 60% | 27% | 2% | 7% | 5% |
| East Asia and Pacific | 70% | 17% | 2% | 6% | 5% |
| Europe | 75% | 14% | 2% | 5% | 4% |
| Near East | 63% | 17% | 1% | 11% | 8% |
| South-Central Asia | 63% | 19% | 2% | 10% | 6% |
| Western Hemisphere | 68% | 16% | 2% | 9% | 5% |
| **Income** | | | | | |
| $0–$19,999 | 70% | 14% | 2% | 8% | 6% |
| $20,000–$74,999 | 72% | 16% | 2% | 5% | 4% |
| $75,000+ | 70% | 15% | 2% | 7% | 5% |
| **Race** | | | | | |
| White | 72% | 16% | 2% | 5% | 5% |
| Black | 69% | 19% | 0% | 7% | 5% |
| Hispanic | 71% | 11% | 2% | 14% | 2% |
| Other Race | 66% | 16% | 2% | 10% | 6% |
| **Education** | | | | | |
| Less Than Bachelor's | 75% | 12% | 2% | 7% | 5% |
| Bachelor's Degree | 70% | 16% | 2% | 7% | 5% |
| More Than Bachelor's | 71% | 16% | 2% | 6% | 5% |
| **Marital Status** | | | | | |
| Married | 72% | 15% | 2% | 6% | 5% |
| Divorced/Widowed | 75% | 11% | 2% | 5% | 7% |
| Never Married | 69% | 16% | 3% | 7% | 4% |

[8] This question was shown to respondents who answered "yes" to whether they returned their absentee ballot or FWAB for the November 8, 2016, General Election (Q11).

**Q11B.** What type of mail service did you use to submit your absentee ballot? (1) National mail service owned or operated by the government of [COUNTRY] (2) FedEx, UPS, DHL or other private delivery carrier (3) Mail service provided by the U.S. Government in [COUNTRY] (e.g., U.S. consulate, military base) (4) Other [*N* = 5,948][9]

| | Absentee Ballot Mail Type | | | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| Respondents | 80% | 6% | 8% | 5% |
| **Age** | | | | |
| Age 18 to 24 | 84% | 8% | 6% | 3% |
| Age 25 to 34 | 78% | 8% | 9% | 5% |
| Age 35 to 44 | 79% | 8% | 8% | 5% |
| Age 45 to 54 | 81% | 6% | 8% | 5% |
| Age 55 to 64 | 79% | 6% | 8% | 7% |
| Age 65 and up | 81% | 4% | 9% | 6% |
| **Sex** | | | | |
| Male | 80% | 6% | 8% | 5% |
| Female | 80% | 7% | 8% | 5% |
| **Region** | | | | |
| Africa | 31% | 15% | 35% | 19% |
| East Asia and Pacific | 83% | 7% | 8% | 2% |
| Europe | 88% | 4% | 5% | 3% |
| Near East | 58% | 12% | 19% | 11% |
| South-Central Asia | 43% | 18% | 29% | 9% |
| Western Hemisphere | 72% | 9% | 9% | 9% |
| **Income** | | | | |
| $0–$19,999 | 76% | 6% | 13% | 5% |
| $20,000–$74,999 | 81% | 5% | 9% | 5% |
| $75,000+ | 81% | 7% | 6% | 6% |
| **Race** | | | | |
| White | 82% | 6% | 7% | 5% |
| Black | 57% | 12% | 25% | 5% |
| Hispanic | 76% | 9% | 8% | 8% |
| Other Race | 73% | 10% | 13% | 4% |
| **Education** | | | | |
| Less Than Bachelor's | 80% | 7% | 8% | 5% |
| Bachelor's Degree | 80% | 8% | 7% | 5% |
| More Than Bachelor's | 81% | 5% | 8% | 6% |
| **Marital Status** | | | | |
| Married | 79% | 6% | 9% | 6% |
| Divorced/Widowed | 83% | 6% | 8% | 3% |
| Never Married | 81% | 8% | 6% | 4% |

[9] This question was shown to respondents who answered "mail" to how they returned their absentee ballot or FWAB (Q11A).

**Q12.** What was the *main reason* you did not vote in the November 8, 2016, General Election? [*N* = 428][10]

| | Reason Did Not Vote | |
|---|---|---|
| | I tried/wanted to vote but did not or could not complete the process | I did not want to vote |
| Respondents | 70% | 30% |
| **Age** | | |
| Age 18 to 24 | 85% | 15% |
| Age 25 to 34 | 74% | 26% |
| Age 35 to 44 | 80% | 20% |
| Age 45 to 54 | 62% | 38% |
| Age 55 to 64 | 59% | 41% |
| Age 65 and up | 50% | 50% |
| **Sex** | | |
| Male | 66% | 34% |
| Female | 74% | 26% |
| **Region** | | |
| Africa | 87% | 13% |
| East Asia and Pacific | 79% | 21% |
| Europe | 68% | 32% |
| Near East | 54% | 46% |
| South-Central Asia | 84% | 16% |
| Western Hemisphere | 68% | 32% |
| **Income** | | |
| $0–$19,999 | 78% | 22% |
| $20,000–$74,999 | 65% | 35% |
| $75,000+ | 74% | 26% |
| **Race** | | |
| White | 67% | 33% |
| Black | 96% | 4% |
| Hispanic | 88% | 12% |
| Other Race | 77% | 23% |
| **Education** | | |
| Less Than Bachelor's | 72% | 28% |
| Bachelor's Degree | 75% | 25% |
| More Than Bachelor's | 66% | 34% |
| **Marital Status** | | |
| Married | 63% | 37% |
| Divorced/Widowed | 57% | 43% |
| Never Married | 85% | 15% |

[10] This question was shown to respondents who answered "no" or "not sure" to whether they returned their absentee ballot or FWAB for the November 8, 2016, General Election (Q11).

**Q12A.** Which of the following best describes why you did not vote in the election? (1) I was not registered to vote (2) I did not know how to get an absentee ballot (3) My absentee ballot arrived too late (4) My absentee ballot did not arrive at all (5) The absentee voting process was too complicated (6) Some other reason [*N* = 286][11]

| | Reason Could Not Vote | | | | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Respondents | 0% | 2% | 35% | 1% | 33% | 30% |
| **Age** | | | | | | |
| Age 18 to 24 | 0% | 9% | 12% | 0% | 48% | 31% |
| Age 25 to 34 | 0% | 0% | 36% | 0% | 39% | 24% |
| Age 35 to 44 | 0% | 0% | 42% | 0% | 32% | 26% |
| Age 45 to 54 | 0% | 0% | 33% | 0% | 13% | 54% |
| Age 55 to 64 | 4% | 0% | 44% | 5% | 19% | 28% |
| Age 65 and up | 0% | 0% | 52% | 0% | 21% | 27% |
| **Sex** | | | | | | |
| Male | 1% | 0% | 35% | 0% | 39% | 25% |
| Female | 0% | 2% | 34% | 1% | 29% | 34% |
| **Region** | | | | | | |
| Africa | 1% | 0% | 58% | 0% | 10% | 31% |
| East Asia and Pacific | 0% | 0% | 52% | 2% | 17% | 30% |
| Europe | 1% | 4% | 20% | 0% | 48% | 27% |
| Near East | 0% | 7% | 12% | 0% | 51% | 31% |
| South-Central Asia | 0% | 0% | 24% | 0% | 42% | 33% |
| Western Hemisphere | 0% | 0% | 38% | 0% | 29% | 33% |
| **Income** | | | | | | |
| $0–$19,999 | 0% | 2% | 22% | 2% | 47% | 27% |
| $20,000–$74,999 | 0% | 3% | 39% | 0% | 25% | 32% |
| $75,000+ | 1% | 0% | 39% | 0% | 29% | 31% |
| **Race** | | | | | | |
| White | 1% | 3% | 34% | 0% | 28% | 35% |
| Black | 0% | 0% | 35% | 5% | 61% | 0% |
| Hispanic | 0% | 0% | 29% | 0% | 62% | 10% |
| Other Race | 0% | 0% | 43% | 3% | 26% | 29% |
| **Education** | | | | | | |
| Less Than Bachelor's | 0% | 4% | 27% | 0% | 34% | 35% |
| Bachelor's Degree | 0% | 2% | 34% | 0% | 34% | 30% |
| More Than Bachelor's | 1% | 0% | 42% | 1% | 30% | 26% |
| **Marital Status** | | | | | | |
| Married | 0% | 0% | 38% | 0% | 28% | 35% |
| Divorced/Widowed | 5% | 0% | 26% | 1% | 35% | 33% |
| Never Married | 0% | 4% | 34% | 1% | 36% | 24% |

[11] This question was shown to respondents who indicated they tried/wanted to vote but did not or could not complete the process (Q12).

**Q13.** If you *had* voted, how confident are you that your vote in the November 8, 2016, General Election would have been counted as you intended? [*N* = 464][12]

| Non-Voter Confidence | | | | |
|---|---|---|---|---|
| | Very confident | Somewhat confident | Not too confident | Not at all confident |
| Respondents | 49% | 35% | 11% | 6% |
| **Age** | | | | |
| Age 18 to 24 | 36% | 45% | 13% | 5% |
| Age 25 to 34 | 50% | 36% | 9% | 5% |
| Age 35 to 44 | 46% | 34% | 8% | 12% |
| Age 45 to 54 | 47% | 29% | 22% | 2% |
| Age 55 to 64 | 54% | 35% | 7% | 3% |
| Age 65 and up | 61% | 27% | 6% | 6% |
| **Sex** | | | | |
| Male | 49% | 35% | 12% | 5% |
| Female | 48% | 35% | 9% | 7% |
| **Region** | | | | |
| Africa | 59% | 31% | 7% | 4% |
| East Asia and Pacific | 46% | 39% | 14% | 1% |
| Europe | 42% | 36% | 10% | 13% |
| Near East | 58% | 24% | 12% | 6% |
| South-Central Asia | 56% | 41% | 3% | 0% |
| Western Hemisphere | 54% | 33% | 9% | 4% |
| **Income** | | | | |
| $0–$19,999 | 50% | 38% | 6% | 6% |
| $20,000–$74,999 | 53% | 35% | 10% | 2% |
| $75,000+ | 46% | 32% | 14% | 8% |
| **Race** | | | | |
| White | 49% | 34% | 12% | 5% |
| Black | 53% | 15% | 0% | 32% |
| Hispanic | 45% | 46% | 5% | 4% |
| Other Race | 51% | 34% | 7% | 8% |
| **Education** | | | | |
| Less Than Bachelor's | 40% | 46% | 10% | 4% |
| Bachelor's Degree | 42% | 39% | 15% | 4% |
| More Than Bachelor's | 59% | 23% | 8% | 10% |
| **Marital Status** | | | | |
| Married | 54% | 28% | 13% | 5% |
| Divorced/Widowed | 44% | 32% | 12% | 12% |
| Never Married | 43% | 44% | 7% | 6% |

[12] This question was shown to respondents who answered "no" or "not sure" to whether they returned their absentee ballot or FWAB for the November 8, 2016, General Election (Q11).

**Q14.** How confident are you that your vote in the November 2016, General Election was counted as you intended? [*N* = 8,943][13]

| | Voter Confidence | | | |
|---|---|---|---|---|
| | Very confident | Somewhat confident | Not too confident | Not at all confident |
| Respondents | 42% | 44% | 10% | 4% |
| **Age** | | | | |
| Age 18 to 24 | 37% | 46% | 11% | 6% |
| Age 25 to 34 | 37% | 46% | 13% | 4% |
| Age 35 to 44 | 39% | 47% | 10% | 4% |
| Age 45 to 54 | 41% | 45% | 10% | 5% |
| Age 55 to 64 | 44% | 44% | 8% | 4% |
| Age 65 and up | 54% | 36% | 7% | 3% |
| **Sex** | | | | |
| Male | 46% | 42% | 9% | 4% |
| Female | 39% | 45% | 11% | 5% |
| **Region** | | | | |
| Africa | 39% | 42% | 14% | 5% |
| East Asia and Pacific | 38% | 48% | 10% | 4% |
| Europe | 41% | 45% | 11% | 4% |
| Near East | 42% | 41% | 12% | 5% |
| South-Central Asia | 47% | 38% | 10% | 6% |
| Western Hemisphere | 48% | 40% | 8% | 4% |
| **Income** | | | | |
| $0–$19,999 | 40% | 40% | 15% | 5% |
| $20,000–$74,999 | 42% | 45% | 9% | 4% |
| $75,000+ | 42% | 44% | 9% | 4% |
| **Race** | | | | |
| White | 42% | 44% | 10% | 4% |
| Black | 42% | 39% | 14% | 5% |
| Hispanic | 42% | 40% | 11% | 7% |
| Other Race | 41% | 44% | 12% | 4% |
| **Education** | | | | |
| Less Than Bachelor's | 45% | 40% | 11% | 3% |
| Bachelor's Degree | 40% | 46% | 10% | 5% |
| More Than Bachelor's | 43% | 43% | 10% | 4% |
| **Marital Status** | | | | |
| Married | 43% | 43% | 9% | 4% |
| Divorced/Widowed | 40% | 44% | 11% | 5% |
| Never Married | 39% | 45% | 12% | 4% |

[13] This question was shown to respondents who answered "yes" to whether they returned their absentee ballot or FWAB for the November 8, 2016, General Election (Q11).

**Q15.** Did you experience any of the following when you attempted to vote absentee in the November 8, 2016, General Election? (1) I did not know how to obtain an absentee ballot [*N* = 10,584] (2) I had difficulty registering to vote [*N* = 10,615] (3) I had difficulty requesting a ballot or completing a Federal Post Card Application (FPCA) [*N* = 10,590] (4) My ballot did not arrive on time [*N* = 10,598] (5) My ballot did not arrive at all [10,598] (6) I expected to receive a ballot automatically but did not [10,622] (7) I was informed that there was a problem with my signature [10,568][14]

| | Difficulty Voting | | | | | | |
|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Respondents | 13% | 9% | 10% | 9% | 6% | 13% | 1% |
| **Age** | | | | | | | |
| Age 18 to 24 | 22% | 16% | 15% | 11% | 5% | 14% | 2% |
| Age 25 to 34 | 15% | 9% | 12% | 10% | 7% | 11% | 1% |
| Age 35 to 44 | 13% | 8% | 10% | 10% | 5% | 12% | 1% |
| Age 45 to 54 | 11% | 7% | 10% | 6% | 6% | 13% | 1% |
| Age 55 to 64 | 9% | 6% | 8% | 8% | 6% | 13% | 1% |
| Age 65 and up | 8% | 7% | 8% | 8% | 8% | 13% | 1% |
| **Sex** | | | | | | | |
| Male | 12% | 8% | 9% | 9% | 6% | 12% | 1% |
| Female | 13% | 9% | 11% | 8% | 6% | 13% | 1% |
| **Region** | | | | | | | |
| Africa | 11% | 5% | 9% | 12% | 6% | 9% | 1% |
| East Asia and Pacific | 13% | 7% | 11% | 12% | 7% | 12% | 1% |
| Europe | 13% | 9% | 10% | 5% | 5% | 12% | 1% |
| Near East | 16% | 9% | 12% | 10% | 10% | 17% | 1% |
| South-Central Asia | 13% | 10% | 13% | 14% | 11% | 19% | 1% |
| Western Hemisphere | 12% | 9% | 10% | 11% | 6% | 12% | 1% |
| **Income** | | | | | | | |
| $0–$19,999 | 18% | 13% | 13% | 15% | 8% | 13% | 1% |
| $20,000–$74,999 | 13% | 8% | 11% | 9% | 7% | 14% | 1% |
| $75,000+ | 11% | 7% | 9% | 7% | 6% | 12% | 1% |
| **Race** | | | | | | | |
| White | 13% | 8% | 10% | 7% | 6% | 11% | 1% |
| Black | 12% | 8% | 11% | 10% | 4% | 16% | 6% |
| Hispanic | 19% | 16% | 17% | 21% | 11% | 20% | 1% |
| Other Race | 12% | 10% | 10% | 13% | 8% | 17% | 1% |
| **Education** | | | | | | | |
| Less Than Bachelor's | 14% | 9% | 10% | 12% | 7% | 15% | 1% |
| Bachelor's Degree | 14% | 10% | 12% | 8% | 7% | 13% | 1% |
| More Than Bachelor's | 11% | 7% | 10% | 7% | 6% | 11% | 1% |
| **Marital Status** | | | | | | | |
| Married | 11% | 7% | 9% | 7% | 6% | 12% | 1% |
| Divorced/Widowed | 13% | 9% | 12% | 9% | 9% | 18% | 2% |
| Never Married | 17% | 11% | 13% | 12% | 7% | 12% | 1% |

[14] Percentages reflect respondents reporting answering "yes" to experiencing this type of voting challenge.

**Q16.** Before taking this survey, were you aware of the Federal Voting Assistance Program (FVAP) or its services? [*N* = 1,090]

| | FVAP Awareness | |
|---|---|---|
| | Yes | No |
| Respondents | 39% | 61% |
| **Age** | | |
| Age 18 to 24 | 41% | 59% |
| Age 25 to 34 | 37% | 63% |
| Age 35 to 44 | 39% | 61% |
| Age 45 to 54 | 41% | 59% |
| Age 55 to 64 | 40% | 60% |
| Age 65 and up | 34% | 66% |
| **Sex** | | |
| Male | 38% | 62% |
| Female | 39% | 61% |
| **Region** | | |
| Africa | 45% | 55% |
| East Asia and Pacific | 41% | 59% |
| Europe | 38% | 62% |
| Near East | 34% | 66% |
| South-Central Asia | 53% | 47% |
| Western Hemisphere | 37% | 63% |
| **Income** | | |
| $0–$19,999 | 39% | 61% |
| $20,000–$74,999 | 39% | 61% |
| $75,000+ | 38% | 62% |
| **Race** | | |
| White | 37% | 63% |
| Black | 49% | 51% |
| Hispanic | 46% | 54% |
| Other Race | 40% | 60% |
| **Education** | | |
| Less Than Bachelor's | 39% | 61% |
| Bachelor's Degree | 38% | 62% |
| More Than Bachelor's | 39% | 61% |
| **Marital Status** | | |
| Married | 40% | 60% |
| Divorced/Widowed | 32% | 68% |
| Never Married | 39% | 61% |

**Q17.** In preparation for the 2016 primaries or General Election, did you use any of the following resources? (1) FVAP.gov [*N* = 4,750] (2) FVAP staff support [*N* = 4,662] (3) FVAP Online Assistant tool [*N* = 4,696] (4) State or local election office website [*N* = 10,766] (5) U.S. government voting assistance resources in country of residence [*N* = 10,690]

| 2016 FVAP website visits[15] | | | | | |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| Respondents | 67% | 10% | 41% | 57% | 10% |
| **Age** | | | | | |
| Age 18 to 24 | 72% | 16% | 47% | 60% | 12% |
| Age 25 to 34 | 82% | 11% | 46% | 64% | 9% |
| Age 35 to 44 | 73% | 7% | 42% | 60% | 9% |
| Age 45 to 54 | 68% | 11% | 40% | 55% | 10% |
| Age 55 to 64 | 59% | 8% | 36% | 54% | 11% |
| Age 65 and up | 43% | 10% | 30% | 43% | 7% |
| **Sex** | | | | | |
| Male | 62% | 8% | 39% | 56% | 10% |
| Female | 71% | 13% | 42% | 57% | 10% |
| **Region** | | | | | |
| Africa | 68% | 10% | 39% | 64% | 19% |
| East Asia and Pacific | 69% | 13% | 40% | 62% | 11% |
| Europe | 69% | 8% | 40% | 58% | 9% |
| Near East | 65% | 16% | 50% | 50% | 13% |
| South-Central Asia | 74% | 10% | 45% | 48% | 20% |
| Western Hemisphere | 62% | 11% | 40% | 51% | 8% |
| **Income** | | | | | |
| $0–$19,999 | 69% | 18% | 43% | 53% | 11% |
| $20,000–$74,999 | 66% | 9% | 40% | 57% | 11% |
| $75,000+ | 67% | 9% | 42% | 58% | 8% |
| **Race** | | | | | |
| White | 66% | 10% | 40% | 57% | 9% |
| Black | 62% | 7% | 35% | 48% | 18% |
| Hispanic | 70% | 14% | 46% | 50% | 12% |
| Other Race | 74% | 13% | 45% | 56% | 13% |
| **Education** | | | | | |
| Less Than Bachelor's | 63% | 14% | 43% | 50% | 12% |
| Bachelor's Degree | 67% | 10% | 41% | 58% | 9% |
| More Than Bachelor's | 69% | 9% | 40% | 59% | 9% |
| **Marital Status** | | | | | |
| Married | 64% | 9% | 39% | 56% | 9% |
| Divorced/Widowed | 63% | 13% | 42% | 49% | 10% |
| Never Married | 74% | 14% | 46% | 61% | 11% |

[15] Percentages reflect respondents reporting answering "yes" to using the following voting resources.

**Q18.** Overall, how satisfied were you with the FVAP website when you visited it in anticipation of the November 8, 2016, General Election? [*N* = 3,069][16]

| Satisfaction with FVAP website | | | | | |
|---|---|---|---|---|---|
| | Very satisfied | Satisfied | Neither satisfied nor dissatisfied | Dissatisfied | Very dissatisfied |
| Respondents | 28% | 49% | 17% | 4% | 1% |
| **Age** | | | | | |
| Age 18 to 24 | 25% | 46% | 19% | 9% | 0% |
| Age 25 to 34 | 18% | 53% | 24% | 5% | 0% |
| Age 35 to 44 | 27% | 52% | 16% | 4% | 0% |
| Age 45 to 54 | 29% | 50% | 14% | 4% | 3% |
| Age 55 to 64 | 35% | 48% | 13% | 3% | 1% |
| Age 65 and up | 49% | 39% | 10% | 2% | 1% |
| **Sex** | | | | | |
| Male | 31% | 49% | 15% | 4% | 2% |
| Female | 26% | 49% | 19% | 5% | 1% |
| **Region** | | | | | |
| Africa | 28% | 56% | 14% | 2% | 1% |
| East Asia and Pacific | 27% | 47% | 19% | 5% | 2% |
| Europe | 26% | 51% | 17% | 5% | 1% |
| Near East | 32% | 46% | 18% | 3% | 1% |
| South-Central Asia | 31% | 45% | 18% | 6% | 0% |
| Western Hemisphere | 34% | 47% | 14% | 4% | 1% |
| **Income** | | | | | |
| $0–$19,999 | 34% | 41% | 21% | 4% | 0% |
| $20,000–$74,999 | 28% | 49% | 18% | 5% | 1% |
| $75,000+ | 28% | 51% | 14% | 5% | 2% |
| **Race** | | | | | |
| White | 29% | 50% | 17% | 5% | 1% |
| Black | 32% | 53% | 12% | 3% | 0% |
| Hispanic | 27% | 48% | 21% | 2% | 1% |
| Other Race | 32% | 44% | 17% | 5% | 3% |
| **Education** | | | | | |
| Less Than Bachelor's | 32% | 45% | 16% | 6% | 1% |
| Bachelor's Degree | 27% | 50% | 17% | 6% | 0% |
| More Than Bachelor's | 28% | 50% | 17% | 3% | 1% |
| **Marital Status** | | | | | |
| Married | 30% | 52% | 13% | 3% | 1% |
| Divorced/Widowed | 40% | 42% | 13% | 4% | 0% |
| Never Married | 22% | 46% | 26% | 6% | 0% |

[16] This question was shown to respondents who visited FVAP.gov or the FVAP Online Assistant tool (Q17).

**Q19.** Please indicate which, if any, FVAP products or services you have used for voting assistance during any election *before* the 2016, General Election. (1) FVAP.gov [*N* = 4,695] (2) FVAP staff support [*N* = 4,580] (3) FVAP Online Assistant tool [4,624] (4) State or local election office website [*N* = 10,614] (5) U.S. government voting assistance resources in country of residence [*N* = 10,539]

| | FVAP Services[17] | | | | |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| Respondents | 52% | 7% | 27% | 45% | 9% |
| **Age** | | | | | |
| Age 18 to 24 | 42% | 9% | 27% | 37% | 7% |
| Age 25 to 34 | 56% | 6% | 26% | 47% | 8% |
| Age 35 to 44 | 57% | 5% | 27% | 49% | 7% |
| Age 45 to 54 | 57% | 7% | 27% | 47% | 11% |
| Age 55 to 64 | 52% | 8% | 27% | 46% | 11% |
| Age 65 and up | 37% | 8% | 22% | 38% | 8% |
| **Sex** | | | | | |
| Male | 49% | 6% | 28% | 45% | 8% |
| Female | 53% | 8% | 25% | 45% | 9% |
| **Region** | | | | | |
| Africa | 43% | 6% | 23% | 46% | 16% |
| East Asia and Pacific | 52% | 9% | 27% | 48% | 9% |
| Europe | 53% | 5% | 26% | 45% | 8% |
| Near East | 53% | 12% | 34% | 41% | 11% |
| South-Central Asia | 58% | 8% | 31% | 41% | 18% |
| Western Hemisphere | 49% | 9% | 26% | 42% | 7% |
| **Income** | | | | | |
| $0–$19,999 | 47% | 11% | 29% | 39% | 8% |
| $20,000–$74,999 | 50% | 6% | 25% | 45% | 10% |
| $75,000+ | 55% | 7% | 28% | 46% | 8% |
| **Race** | | | | | |
| White | 50% | 6% | 26% | 46% | 8% |
| Black | 53% | 11% | 24% | 39% | 19% |
| Hispanic | 55% | 8% | 32% | 39% | 11% |
| Other Race | 55% | 11% | 31% | 40% | 10% |
| **Education** | | | | | |
| Less Than Bachelor's | 45% | 9% | 27% | 38% | 10% |
| Bachelor's Degree | 52% | 8% | 28% | 44% | 9% |
| More Than Bachelor's | 55% | 6% | 26% | 48% | 8% |
| **Marital Status** | | | | | |
| Married | 53% | 6% | 26% | 47% | 9% |
| Divorced/Widowed | 45% | 10% | 29% | 40% | 11% |
| Never Married | 51% | 8% | 29% | 42% | 8% |

[17] Percentages reflect respondents reporting answering "yes" to using the following FVAP products or services for voting assistance.

**Q20.** What source led you to visit your State or local election office website when you visited in anticipation of the November 8, 2016, General Election? [*N* = 5,679][18]

| Source of State/Local Website | | | | | | |
|---|---|---|---|---|---|---|
| | FVAP.gov | Internet search | State or local election official | Family or friend | State Department or Consular Services | Other |
| Respondents | 12% | 55% | 10% | 10% | 4% | 10% |
| **Age** | | | | | | |
| Age 18 to 24 | 13% | 47% | 2% | 31% | 2% | 3% |
| Age 25 to 34 | 10% | 67% | 6% | 8% | 2% | 7% |
| Age 35 to 44 | 11% | 59% | 7% | 8% | 4% | 9% |
| Age 45 to 54 | 12% | 55% | 11% | 7% | 5% | 11% |
| Age 55 to 64 | 13% | 50% | 14% | 5% | 5% | 13% |
| Age 65 and up | 10% | 42% | 21% | 8% | 4% | 16% |
| **Sex** | | | | | | |
| Male | 12% | 54% | 11% | 10% | 4% | 9% |
| Female | 11% | 56% | 8% | 11% | 4% | 10% |
| **Region** | | | | | | |
| Africa | 15% | 47% | 10% | 11% | 9% | 7% |
| East Asia and Pacific | 11% | 59% | 9% | 8% | 5% | 8% |
| Europe | 12% | 56% | 9% | 11% | 3% | 10% |
| Near East | 12% | 50% | 8% | 14% | 7% | 10% |
| South-Central Asia | 21% | 44% | 11% | 10% | 7% | 7% |
| Western Hemisphere | 12% | 53% | 12% | 10% | 3% | 10% |
| **Income** | | | | | | |
| $0–$19,999 | 10% | 58% | 7% | 16% | 4% | 6% |
| $20,000–$74,999 | 12% | 54% | 9% | 10% | 4% | 11% |
| $75,000+ | 12% | 56% | 10% | 9% | 3% | 9% |
| **Race** | | | | | | |
| White | 11% | 56% | 10% | 10% | 4% | 10% |
| Black | 24% | 31% | 15% | 14% | 9% | 8% |
| Hispanic | 16% | 55% | 7% | 11% | 5% | 6% |
| Other Race | 11% | 57% | 8% | 13% | 4% | 7% |
| **Education** | | | | | | |
| Less Than Bachelor's | 12% | 48% | 9% | 18% | 4% | 8% |
| Bachelor's Degree | 11% | 58% | 9% | 10% | 4% | 9% |
| More Than Bachelor's | 12% | 56% | 11% | 8% | 3% | 11% |
| **Marital Status** | | | | | | |
| Married | 12% | 55% | 11% | 7% | 4% | 11% |
| Divorced/Widowed | 13% | 50% | 15% | 7% | 4% | 11% |
| Never Married | 12% | 57% | 6% | 18% | 3% | 5% |

[18] This question was shown to respondents who visited a state or local election office website (Q17).

**Q21.** Before taking this survey, were you aware that you could use the Federal Post Card Application (FPCA) to register to vote and request an absentee ballot? [*N* = 10,898]

| | FPCA Awareness | |
|---|---|---|
| | Yes | No |
| Respondents | 30% | 70% |
| **Age** | | |
| Age 18 to 24 | 33% | 67% |
| Age 25 to 34 | 26% | 74% |
| Age 35 to 44 | 30% | 70% |
| Age 45 to 54 | 31% | 69% |
| Age 55 to 64 | 35% | 65% |
| Age 65 and up | 29% | 71% |
| **Sex** | | |
| Male | 30% | 70% |
| Female | 30% | 70% |
| **Region** | | |
| Africa | 38% | 62% |
| East Asia and Pacific | 29% | 71% |
| Europe | 32% | 68% |
| Near East | 31% | 69% |
| South-Central Asia | 50% | 50% |
| Western Hemisphere | 27% | 73% |
| **Income** | | |
| $0–$19,999 | 32% | 68% |
| $20,000–$74,999 | 32% | 68% |
| $75,000+ | 28% | 72% |
| **Race** | | |
| White | 29% | 71% |
| Black | 33% | 67% |
| Hispanic | 36% | 64% |
| Other Race | 34% | 66% |
| **Education** | | |
| Less Than Bachelor's | 31% | 69% |
| Bachelor's Degree | 30% | 70% |
| More Than Bachelor's | 31% | 69% |
| **Marital Status** | | |
| Married | 30% | 70% |
| Divorced/Widowed | 29% | 71% |
| Never Married | 31% | 69% |

**Q21A.** Did you use the Federal Post Card Application (FPCA) to request your absentee ballot or did you use another method? (1) Yes, I used an FPCA to request an absentee ballot. (2) No, I used a State or local form to request an absentee ballot. (3) No, I used a non-government website (e.g., Rock the Vote [RTV], Overseas Vote Foundation [OVF]) to request an absentee ballot. (4) No, I used another method. (5) Other [*N* = 3,375][19]

| | Used FPCA | | | | |
|---|---|---|---|---|---|
| | FPCA | State or local form | Non-government website | Another method | Other |
| Respondents | 55% | 23% | 6% | 10% | 7% |
| **Age** | | | | | |
| Age 18 to 24 | 58% | 23% | 5% | 10% | 4% |
| Age 25 to 34 | 61% | 20% | 7% | 5% | 6% |
| Age 35 to 44 | 52% | 22% | 7% | 11% | 8% |
| Age 45 to 54 | 57% | 18% | 8% | 11% | 7% |
| Age 55 to 64 | 52% | 28% | 6% | 8% | 6% |
| Age 65 and up | 48% | 29% | 4% | 13% | 6% |
| **Sex** | | | | | |
| Male | 52% | 27% | 5% | 9% | 6% |
| Female | 56% | 20% | 7% | 10% | 7% |
| **Region** | | | | | |
| Africa | 50% | 27% | 5% | 14% | 5% |
| East Asia and Pacific | 56% | 24% | 7% | 7% | 7% |
| Europe | 56% | 23% | 6% | 9% | 6% |
| Near East | 51% | 20% | 7% | 14% | 8% |
| South-Central Asia | 69% | 16% | 3% | 8% | 5% |
| Western Hemisphere | 51% | 24% | 6% | 12% | 8% |
| **Income** | | | | | |
| $0–$19,999 | 47% | 29% | 6% | 11% | 7% |
| $20,000–$74,999 | 55% | 22% | 7% | 10% | 6% |
| $75,000+ | 57% | 23% | 6% | 8% | 6% |
| **Race** | | | | | |
| White | 52% | 25% | 7% | 10% | 6% |
| Black | 52% | 28% | 5% | 11% | 3% |
| Hispanic | 56% | 18% | 4% | 11% | 11% |
| Other Race | 69% | 15% | 3% | 5% | 7% |
| **Education** | | | | | |
| Less Than Bachelor's | 52% | 23% | 5% | 13% | 7% |
| Bachelor's Degree | 59% | 19% | 6% | 8% | 8% |
| More Than Bachelor's | 53% | 26% | 7% | 9% | 5% |
| **Marital Status** | | | | | |
| Married | 52% | 24% | 6% | 11% | 7% |
| Divorced/Widowed | 55% | 24% | 3% | 9% | 9% |
| Never Married | 58% | 22% | 7% | 7% | 6% |

[19] This question was shown to respondents who requested an absentee ballot and were aware that they could use an FPCA to register to vote and request an absentee ballot (Q9, Q21).

**Q22.** Before taking this survey, were you aware of the Federal Write-In Absentee Ballot (FWAB)? [*N* = 6,628][20]

| | FWAB Awareness | |
|---|---|---|
| | Yes | No |
| Respondents | 20% | 80% |
| **Age** | | |
| Age 18 to 24 | 23% | 77% |
| Age 25 to 34 | 18% | 82% |
| Age 35 to 44 | 20% | 80% |
| Age 45 to 54 | 20% | 80% |
| Age 55 to 64 | 19% | 81% |
| Age 65 and up | 18% | 82% |
| **Sex** | | |
| Male | 20% | 80% |
| Female | 19% | 81% |
| **Region** | | |
| Africa | 23% | 77% |
| East Asia and Pacific | 19% | 81% |
| Europe | 20% | 80% |
| Near East | 22% | 78% |
| South-Central Asia | 30% | 70% |
| Western Hemisphere | 18% | 82% |
| **Income** | | |
| $0–$19,999 | 22% | 78% |
| $20,000–$74,999 | 20% | 80% |
| $75,000+ | 18% | 82% |
| **Race** | | |
| White | 19% | 81% |
| Black | 33% | 67% |
| Hispanic | 24% | 76% |
| Other Race | 18% | 82% |
| **Education** | | |
| Less Than Bachelor's | 19% | 81% |
| Bachelor's Degree | 19% | 81% |
| More Than Bachelor's | 20% | 80% |
| **Marital Status** | | |
| Married | 19% | 81% |
| Divorced/Widowed | 20% | 80% |
| Never Married | 21% | 79% |

[20] This question was shown to respondents who answered "no" or "not sure" to whether they obtained a FWAB for the November 8, 2016, General Election (Q10A).

**Q23.** Did you receive information about the absentee voting process from any of the following sources in 2016? (1) State or local election official [*N* = 10,601] (2) U.S. newspapers, magazines, radio, or TV [*N* = 10,524] (3) International newspapers, magazines, radio, or TV [*N* = 10,524] (4) Family or friends living outside of [COUNTRY] [*N* = 10,524] (5) Family or friends living in [COUNTRY] [*N* = 10,550] (6) Internet other than social media [*N* = 10,586] (7) Social media [*N* = 10,513] (8) Directly from candidates/parties [*N* = 10,526] (9) Employer/HR department [*N* = 10,496] (10) An organization for Americans living abroad [*N* = 10,605] (11) Other [*N* = 9,659]

| Procedural Information[21] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Respondents | 27% | 7% | 7% | 16% | 24% | 42% | 18% | 8% | 2% | 26% | 7% |
| **Age** | | | | | | | | | | | |
| Age 18 to 24 | 17% | 7% | 8% | 33% | 49% | 46% | 18% | 9% | 2% | 18% | 9% |
| Age 25 to 34 | 20% | 6% | 5% | 20% | 30% | 48% | 24% | 6% | 3% | 23% | 6% |
| Age 35 to 44 | 25% | 7% | 5% | 16% | 25% | 45% | 23% | 7% | 2% | 25% | 7% |
| Age 45 to 54 | 29% | 7% | 6% | 11% | 20% | 40% | 17% | 8% | 1% | 29% | 8% |
| Age 55 to 64 | 34% | 7% | 8% | 9% | 15% | 40% | 12% | 9% | 1% | 30% | 9% |
| Age 65 and up | 36% | 9% | 9% | 10% | 14% | 32% | 7% | 10% | 0% | 26% | 8% |
| **Sex** | | | | | | | | | | | |
| Male | 31% | 7% | 7% | 14% | 20% | 43% | 13% | 9% | 2% | 23% | 7% |
| Female | 24% | 7% | 6% | 17% | 27% | 41% | 21% | 8% | 2% | 28% | 8% |
| **Region** | | | | | | | | | | | |
| Africa | 30% | 5% | 3% | 16% | 29% | 42% | 15% | 6% | 9% | 21% | 10% |
| East Asia and Pacific | 24% | 6% | 6% | 14% | 23% | 40% | 17% | 7% | 2% | 19% | 6% |
| Europe | 27% | 7% | 7% | 17% | 25% | 43% | 20% | 9% | 1% | 28% | 7% |
| Near East | 22% | 5% | 8% | 13% | 38% | 45% | 16% | 6% | 2% | 32% | 9% |
| South-Central Asia | 23% | 9% | 7% | 17% | 21% | 47% | 17% | 6% | 2% | 18% | 10% |
| Western Hemisphere | 31% | 8% | 7% | 14% | 20% | 40% | 14% | 8% | 2% | 25% | 8% |
| **Income** | | | | | | | | | | | |
| $0–$19,999 | 23% | 10% | 8% | 25% | 28% | 43% | 20% | 9% | 2% | 21% | 9% |
| $20,000–$74,999 | 27% | 7% | 7% | 15% | 24% | 44% | 20% | 8% | 2% | 25% | 8% |
| $75,000+ | 28% | 6% | 6% | 13% | 23% | 41% | 16% | 8% | 1% | 28% | 7% |
| **Race** | | | | | | | | | | | |
| White | 28% | 6% | 7% | 15% | 25% | 43% | 17% | 8% | 1% | 27% | 7% |
| Black | 31% | 7% | 5% | 17% | 23% | 26% | 13% | 9% | 4% | 20% | 13% |
| Hispanic | 23% | 10% | 8% | 20% | 24% | 39% | 19% | 10% | 3% | 17% | 10% |
| Other Race | 21% | 9% | 7% | 17% | 22% | 41% | 20% | 7% | 2% | 20% | 9% |
| **Education** | | | | | | | | | | | |
| Less Than Bachelor's | 24% | 8% | 9% | 18% | 30% | 39% | 16% | 8% | 1% | 20% | 9% |
| Bachelor's Degree | 25% | 7% | 7% | 16% | 25% | 43% | 19% | 7% | 2% | 26% | 8% |
| More Than Bachelor's | 30% | 7% | 6% | 15% | 22% | 43% | 17% | 8% | 2% | 28% | 7% |
| **Marital Status** | | | | | | | | | | | |
| Married | 29% | 7% | 7% | 13% | 20% | 42% | 16% | 8% | 1% | 27% | 7% |
| Divorced/Widowed | 32% | 9% | 8% | 13% | 18% | 38% | 17% | 12% | 1% | 29% | 11% |
| Never Married | 22% | 7% | 7% | 24% | 35% | 44% | 21% | 7% | 3% | 21% | 7% |

[21] Percentages reflect respondents reporting answering "yes" to receiving absentee voting information from the following sources.

**Q24.** Did you access the internet on a cell phone, tablet or other mobile handheld device, at least occasionally, in October 2016? [*N* = 10,918]

| Access Internet on Mobile Device | | | |
|---|---|---|---|
| | Yes | No | Not sure/Don't know |
| Respondents | 81% | 16% | 4% |
| **Age** | | | |
| Age 18 to 24 | 91% | 6% | 3% |
| Age 25 to 34 | 93% | 5% | 2% |
| Age 35 to 44 | 89% | 8% | 3% |
| Age 45 to 54 | 84% | 12% | 4% |
| Age 55 to 64 | 72% | 23% | 4% |
| Age 65 and up | 56% | 39% | 6% |
| **Sex** | | | |
| Male | 80% | 17% | 3% |
| Female | 81% | 15% | 4% |
| **Region** | | | |
| Africa | 84% | 14% | 2% |
| East Asia and Pacific | 83% | 14% | 2% |
| Europe | 83% | 14% | 4% |
| Near East | 76% | 18% | 6% |
| South-Central Asia | 79% | 16% | 5% |
| Western Hemisphere | 76% | 21% | 4% |
| **Income** | | | |
| $0–$19,999 | 75% | 20% | 6% |
| $20,000–$74,999 | 78% | 18% | 4% |
| $75,000+ | 87% | 11% | 2% |
| **Race** | | | |
| White | 81% | 16% | 3% |
| Black | 76% | 18% | 6% |
| Hispanic | 78% | 17% | 5% |
| Other Race | 81% | 13% | 5% |
| **Education** | | | |
| Less Than Bachelor's | 73% | 21% | 6% |
| Bachelor's Degree | 83% | 13% | 4% |
| More Than Bachelor's | 82% | 15% | 3% |
| **Marital Status** | | | |
| Married | 79% | 17% | 4% |
| Divorced/Widowed | 68% | 27% | 6% |
| Never Married | 88% | 9% | 3% |

**Q25.** How would you characterize the reliability of postal service in [COUNTRY] relative to the United States Postal Service? [*N* = 10,901]

| Postal Reliability | | | | | |
|---|---|---|---|---|---|
| | Much less reliable | Somewhat less reliable | About the same level of reliability | Somewhat more reliable | Much more reliable |
| Respondents | 17% | 16% | 46% | 12% | 9% |
| **Age** | | | | | |
| Age 18 to 24 | 16% | 14% | 45% | 16% | 8% |
| Age 25 to 34 | 16% | 17% | 44% | 12% | 10% |
| Age 35 to 44 | 15% | 17% | 47% | 13% | 8% |
| Age 45 to 54 | 16% | 15% | 47% | 12% | 10% |
| Age 55 to 64 | 20% | 17% | 44% | 10% | 9% |
| Age 65 and up | 21% | 17% | 47% | 9% | 6% |
| **Sex** | | | | | |
| Male | 16% | 16% | 46% | 12% | 9% |
| Female | 18% | 17% | 46% | 11% | 8% |
| **Region** | | | | | |
| Africa | 70% | 22% | 6% | 2% | 1% |
| East Asia and Pacific | 18% | 12% | 40% | 15% | 15% |
| Europe | 6% | 12% | 55% | 17% | 11% |
| Near East | 43% | 33% | 23% | 1% | 1% |
| South-Central Asia | 31% | 34% | 29% | 3% | 3% |
| Western Hemisphere | 25% | 23% | 45% | 4% | 2% |
| **Income** | | | | | |
| $0–$19,999 | 27% | 20% | 35% | 10% | 8% |
| $20,000–$74,999 | 18% | 17% | 46% | 11% | 8% |
| $75,000+ | 13% | 15% | 49% | 13% | 10% |
| **Race** | | | | | |
| White | 15% | 16% | 48% | 12% | 8% |
| Black | 29% | 19% | 37% | 8% | 8% |
| Hispanic | 31% | 20% | 36% | 6% | 7% |
| Other Race | 19% | 15% | 41% | 13% | 12% |
| **Education** | | | | | |
| Less Than Bachelor's | 19% | 18% | 44% | 12% | 7% |
| Bachelor's Degree | 16% | 17% | 46% | 12% | 9% |
| More Than Bachelor's | 17% | 16% | 47% | 12% | 9% |
| **Marital Status** | | | | | |
| Married | 16% | 18% | 46% | 12% | 8% |
| Divorced/Widowed | 22% | 15% | 44% | 10% | 9% |
| Never Married | 18% | 15% | 45% | 13% | 10% |

**Q26.** How interested or uninterested were you in the election held on November 8, 2016? [*N* = 10,916]

| Used FPCA: Interest in Election | | | | | |
|---|---|---|---|---|---|
| | Very interested | Somewhat interested | Neither interested nor uninterested | Somewhat uninterested | Very uninterested |
| Respondents | 88% | 8% | 1% | 1% | 1% |
| **Age** | | | | | |
| Age 18 to 24 | 80% | 15% | 2% | 2% | 1% |
| Age 25 to 34 | 87% | 9% | 1% | 0% | 2% |
| Age 35 to 44 | 89% | 8% | 1% | 0% | 1% |
| Age 45 to 54 | 90% | 8% | 1% | 1% | 1% |
| Age 55 to 64 | 90% | 7% | 1% | 0% | 1% |
| Age 65 and up | 90% | 6% | 2% | 1% | 1% |
| **Sex** | | | | | |
| Male | 87% | 9% | 2% | 1% | 2% |
| Female | 89% | 8% | 1% | 1% | 1% |
| **Region** | | | | | |
| Africa | 90% | 7% | 1% | 1% | 1% |
| East Asia and Pacific | 85% | 10% | 3% | 1% | 2% |
| Europe | 89% | 8% | 1% | 0% | 1% |
| Near East | 83% | 11% | 2% | 3% | 1% |
| South-Central Asia | 84% | 13% | 2% | 1% | 1% |
| Western Hemisphere | 91% | 6% | 1% | 1% | 1% |
| **Income** | | | | | |
| $0–$19,999 | 83% | 13% | 2% | 1% | 2% |
| $20,000–$74,999 | 87% | 8% | 2% | 1% | 2% |
| $75,000+ | 92% | 6% | 1% | 0% | 1% |
| **Race** | | | | | |
| White | 89% | 8% | 1% | 1% | 1% |
| Black | 87% | 9% | 3% | 0% | 1% |
| Hispanic | 91% | 7% | 1% | 1% | 1% |
| Other Race | 81% | 12% | 4% | 1% | 2% |
| **Education** | | | | | |
| Less Than Bachelor's | 81% | 13% | 2% | 2% | 2% |
| Bachelor's Degree | 88% | 8% | 2% | 0% | 1% |
| More Than Bachelor's | 92% | 6% | 1% | 1% | 1% |
| **Marital Status** | | | | | |
| Married | 90% | 7% | 1% | 1% | 1% |
| Divorced/Widowed | 88% | 8% | 1% | 1% | 1% |
| Never Married | 85% | 10% | 2% | 1% | 2% |

**Q27.** How much attention did you pay in October 2016 to news about U.S. politics and the November 8, 2016, General Election? [*N* = 10,932]

| Used FPCA: Election News | | | | | |
|---|---|---|---|---|---|
| | A great deal | A lot | A moderate amount | A little | None at all |
| Respondents | 67% | 20% | 10% | 2% | 1% |
| **Age** | | | | | |
| Age 18 to 24 | 52% | 27% | 14% | 6% | 2% |
| Age 25 to 34 | 60% | 24% | 13% | 3% | 0% |
| Age 35 to 44 | 67% | 19% | 11% | 2% | 1% |
| Age 45 to 54 | 70% | 18% | 10% | 2% | 0% |
| Age 55 to 64 | 75% | 15% | 8% | 2% | 0% |
| Age 65 and up | 74% | 16% | 7% | 2% | 1% |
| **Sex** | | | | | |
| Male | 69% | 19% | 9% | 2% | 1% |
| Female | 65% | 20% | 12% | 3% | 0% |
| **Region** | | | | | |
| Africa | 61% | 21% | 14% | 3% | 1% |
| East Asia and Pacific | 65% | 20% | 13% | 2% | 0% |
| Europe | 68% | 20% | 10% | 2% | 0% |
| Near East | 59% | 24% | 11% | 4% | 2% |
| South-Central Asia | 56% | 25% | 16% | 2% | 1% |
| Western Hemisphere | 70% | 17% | 10% | 2% | 1% |
| **Income** | | | | | |
| $0–$19,999 | 54% | 25% | 13% | 6% | 2% |
| $20,000–$74,999 | 64% | 21% | 12% | 2% | 1% |
| $75,000+ | 75% | 16% | 8% | 1% | 0% |
| **Race** | | | | | |
| White | 69% | 19% | 10% | 2% | 0% |
| Black | 68% | 15% | 13% | 2% | 1% |
| Hispanic | 60% | 25% | 12% | 2% | 2% |
| Other Race | 61% | 21% | 13% | 4% | 1% |
| **Education** | | | | | |
| Less Than Bachelor's | 60% | 22% | 12% | 5% | 1% |
| Bachelor's Degree | 64% | 20% | 12% | 2% | 1% |
| More Than Bachelor's | 72% | 18% | 8% | 1% | 0% |
| **Marital Status** | | | | | |
| Married | 71% | 17% | 10% | 2% | 0% |
| Divorced/Widowed | 70% | 17% | 10% | 2% | 1% |
| Never Married | 58% | 25% | 12% | 4% | 1% |

**Q28.** Do you ever use social networking sites like Facebook or Twitter to do any of the following? (1) Post links to political stories or articles for others to read [*N* = 10,845] (2) Post your own thoughts or comments on political or social issues [*N* = 10,849] (3) Encourage other people to take action on a political or social issue that is important to you [*N* = 10,841] (4) Encourage other people to vote [*N* = 10,838] (5) Repost content related to political or social issues that was originally posted by someone else [*N* = 10,842] (6) "Like" or promote material related to political or social issues that others have posted [*N* = 10,850]

| Social Network Activity[22] | | | | | | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| Respondents | 36% | 35% | 34% | 39% | 39% | 48% |
| **Age** | | | | | | |
| Age 18 to 24 | 36% | 32% | 39% | 46% | 42% | 60% |
| Age 25 to 34 | 45% | 40% | 42% | 47% | 46% | 59% |
| Age 35 to 44 | 44% | 43% | 40% | 46% | 45% | 55% |
| Age 45 to 54 | 36% | 37% | 33% | 39% | 39% | 48% |
| Age 55 to 64 | 32% | 31% | 28% | 32% | 34% | 40% |
| Age 65 and up | 23% | 23% | 23% | 26% | 24% | 28% |
| **Sex** | | | | | | |
| Male | 32% | 32% | 28% | 33% | 32% | 40% |
| Female | 40% | 37% | 39% | 45% | 44% | 54% |
| **Region** | | | | | | |
| Africa | 36% | 36% | 39% | 42% | 37% | 50% |
| East Asia and Pacific | 37% | 38% | 36% | 43% | 40% | 52% |
| Europe | 38% | 36% | 35% | 40% | 39% | 49% |
| Near East | 32% | 28% | 28% | 29% | 35% | 40% |
| South-Central Asia | 24% | 20% | 24% | 28% | 25% | 34% |
| Western Hemisphere | 35% | 33% | 33% | 39% | 38% | 46% |
| **Income** | | | | | | |
| $0–$19,999 | 36% | 35% | 37% | 41% | 38% | 49% |
| $20,000–$74,999 | 38% | 37% | 36% | 41% | 41% | 51% |
| $75,000+ | 37% | 35% | 34% | 40% | 39% | 47% |
| **Race** | | | | | | |
| White | 37% | 35% | 34% | 39% | 39% | 48% |
| Black | 29% | 32% | 32% | 42% | 33% | 38% |
| Hispanic | 38% | 37% | 39% | 43% | 45% | 50% |
| Other Race | 35% | 33% | 36% | 43% | 37% | 50% |
| **Education** | | | | | | |
| Less Than Bachelor's | 33% | 32% | 31% | 38% | 38% | 46% |
| Bachelor's Degree | 38% | 36% | 37% | 43% | 40% | 52% |
| More Than Bachelor's | 37% | 36% | 34% | 38% | 38% | 46% |
| **Marital Status** | | | | | | |
| Married | 35% | 34% | 32% | 37% | 37% | 45% |
| Divorced/Widowed | 38% | 37% | 35% | 40% | 41% | 46% |
| Never Married | 39% | 36% | 39% | 45% | 42% | 55% |

[22] Percentages reflect respondents reporting answering "yes" to using social networking sites to do any of the following.

**Q33.** As of November 8, 2016, in which country or countries did you hold citizenship? *Mark all that apply*. [*N* = 10,965]

| | Citizenship | | |
|---|---|---|---|
| | United States | Country of Residence | Other |
| Respondents | 100% | 42% | 7% |
| **Age** | | | |
| Age 18 to 24 | 100% | 67% | 11% |
| Age 25 to 34 | 100% | 32% | 7% |
| Age 35 to 44 | 100% | 32% | 7% |
| Age 45 to 54 | 100% | 40% | 8% |
| Age 55 to 64 | 100% | 45% | 5% |
| Age 65 and up | 100% | 49% | 4% |
| **Sex** | | | |
| Male | 100% | 43% | 6% |
| Female | 100% | 42% | 7% |
| **Region** | | | |
| Africa | 100% | 12% | 6% |
| East Asia and Pacific | 100% | 27% | 4% |
| Europe | 100% | 40% | 9% |
| Near East | 100% | 71% | 6% |
| South-Central Asia | 100% | 11% | 3% |
| Western Hemisphere | 100% | 55% | 4% |
| **Income** | | | |
| $0–$19,999 | 100% | 47% | 8% |
| $20,000–$74,999 | 100% | 40% | 5% |
| $75,000+ | 100% | 41% | 8% |
| **Race** | | | |
| White | 100% | 43% | 7% |
| Black | 100% | 41% | 4% |
| Hispanic | 100% | 51% | 12% |
| Other Race | 100% | 30% | 4% |
| **Education** | | | |
| Less Than Bachelor's | 100% | 55% | 6% |
| Bachelor's Degree | 100% | 38% | 6% |
| More Than Bachelor's | 100% | 40% | 8% |
| **Marital Status** | | | |
| Married | 100% | 39% | 6% |
| Divorced/Widowed | 100% | 48% | 6% |
| Never Married | 100% | 48% | 9% |

**Q35.** As of November 8, 2016, in which country or countries did your spouse hold citizenship? *Mark all that apply*. [*N* = 7,375][23]

| | Spouse citizenship | | |
|---|---|---|---|
| | United States | Country of Residence | Other |
| Respondents | 40% | 66% | 14% |
| **Age** | | | |
| Age 18 to 24 | 28% | 67% | 9% |
| Age 25 to 34 | 29% | 67% | 14% |
| Age 35 to 44 | 38% | 61% | 17% |
| Age 45 to 54 | 42% | 64% | 14% |
| Age 55 to 64 | 47% | 66% | 14% |
| Age 65 and up | 47% | 74% | 12% |
| **Sex** | | | |
| Male | 42% | 66% | 15% |
| Female | 38% | 67% | 14% |
| **Region** | | | |
| Africa | 61% | 31% | 23% |
| East Asia and Pacific | 46% | 56% | 17% |
| Europe | 32% | 68% | 15% |
| Near East | 58% | 71% | 16% |
| South-Central Asia | 75% | 26% | 6% |
| Western Hemisphere | 42% | 74% | 10% |
| **Income** | | | |
| $0–$19,999 | 36% | 70% | 12% |
| $20,000–$74,999 | 36% | 71% | 11% |
| $75,000+ | 44% | 62% | 17% |
| **Race** | | | |
| White | 39% | 68% | 15% |
| Black | 38% | 60% | 15% |
| Hispanic | 38% | 71% | 12% |
| Other Race | 50% | 51% | 12% |
| **Education** | | | |
| Less Than Bachelor's | 35% | 76% | 10% |
| Bachelor's Degree | 40% | 66% | 13% |
| More Than Bachelor's | 42% | 63% | 16% |
| **Marital Status** | | | |
| Married | 40% | 66% | 14% |
| Divorced/Widowed | N/A | N/A | N/A |
| Never Married | N/A | N/A | N/A |

[23] This question was shown to respondents who indicated that they were married (Q34).

**Q36.** Do you have children? [*N* = 10,832]

| | Children | |
|---|---|---|
| | Yes | No |
| Respondents | 54% | 46% |
| **Age** | | |
| Age 18 to 24 | 3% | 97% |
| Age 25 to 34 | 23% | 77% |
| Age 35 to 44 | 63% | 37% |
| Age 45 to 54 | 73% | 27% |
| Age 55 to 64 | 71% | 29% |
| Age 65 and up | 75% | 25% |
| **Sex** | | |
| Male | 57% | 43% |
| Female | 51% | 49% |
| **Region** | | |
| Africa | 49% | 51% |
| East Asia and Pacific | 50% | 50% |
| Europe | 50% | 50% |
| Near East | 70% | 30% |
| South-Central Asia | 65% | 35% |
| Western Hemisphere | 58% | 42% |
| **Income** | | |
| $0–$19,999 | 33% | 67% |
| $20,000–$74,999 | 51% | 49% |
| $75,000+ | 63% | 37% |
| **Race** | | |
| White | 54% | 46% |
| Black | 62% | 38% |
| Hispanic | 46% | 54% |
| Other Race | 48% | 52% |
| **Education** | | |
| Less Than Bachelor's | 48% | 52% |
| Bachelor's Degree | 50% | 50% |
| More Than Bachelor's | 59% | 41% |
| **Marital Status** | | |
| Married | 74% | 26% |
| Divorced/Widowed | 69% | 31% |
| Never Married | 4% | 96% |

**Q37.** As of November 8, 2016, in which country or countries did your children hold citizenship? *Mark all that apply*. [*N* = 6,854][24]

| | Children citizenship | | |
|---|---|---|---|
| | United States | Country of Residence | Other |
| Respondents | 85% | 64% | 10% |
| **Age** | | | |
| Age 18 to 24 | 22% | 90% | 0% |
| Age 25 to 34 | 66% | 72% | 8% |
| Age 35 to 44 | 81% | 64% | 13% |
| Age 45 to 54 | 88% | 64% | 12% |
| Age 55 to 64 | 90% | 64% | 9% |
| Age 65 and up | 88% | 60% | 9% |
| **Sex** | | | |
| Male | 85% | 62% | 10% |
| Female | 84% | 67% | 10% |
| **Region** | | | |
| Africa | 93% | 28% | 13% |
| East Asia and Pacific | 90% | 52% | 10% |
| Europe | 84% | 68% | 13% |
| Near East | 89% | 71% | 9% |
| South-Central Asia | 96% | 14% | 4% |
| Western Hemisphere | 79% | 71% | 7% |
| **Income** | | | |
| $0–$19,999 | 80% | 66% | 7% |
| $20,000–$74,999 | 85% | 66% | 8% |
| $75,000+ | 86% | 63% | 13% |
| **Race** | | | |
| White | 85% | 67% | 11% |
| Black | 79% | 57% | 9% |
| Hispanic | 80% | 67% | 8% |
| Other Race | 88% | 43% | 8% |
| **Education** | | | |
| Less Than Bachelor's | 81% | 65% | 7% |
| Bachelor's Degree | 85% | 65% | 10% |
| More Than Bachelor's | 86% | 64% | 12% |
| **Marital Status** | | | |
| Married | 85% | 64% | 10% |
| Divorced/Widowed | 89% | 64% | 11% |
| Never Married | 62% | 79% | 14% |

[24] This question was shown to respondents who indicated that they had children (Q36).

**Q39.** In the week before November 8, 2016, did you work either full-time or part-time? [*N* = 10,765]

| | Employment Status | | | | | |
|---|---|---|---|---|---|---|
| | Yes | No, I was retired | No, I was disabled | No, I was unable to work | No, I was a caretaker or stay-at-home parent | No, other |
| Respondents | 64% | 16% | 1% | 2% | 5% | 12% |
| **Age** | | | | | | |
| Age 18 to 24 | 42% | 0% | 1% | 7% | 1% | 48% |
| Age 25 to 34 | 78% | 0% | 0% | 2% | 5% | 15% |
| Age 35 to 44 | 81% | 0% | 1% | 1% | 13% | 5% |
| Age 45 to 54 | 82% | 1% | 1% | 2% | 7% | 7% |
| Age 55 to 64 | 68% | 19% | 2% | 1% | 3% | 7% |
| Age 65 and up | 23% | 72% | 0% | 1% | 1% | 3% |
| **Sex** | | | | | | |
| Male | 67% | 18% | 1% | 1% | 1% | 11% |
| Female | 61% | 15% | 1% | 3% | 8% | 12% |
| **Region** | | | | | | |
| Africa | 76% | 8% | 0% | 2% | 4% | 10% |
| East Asia and Pacific | 71% | 14% | 1% | 2% | 5% | 6% |
| Europe | 65% | 12% | 1% | 2% | 6% | 15% |
| Near East | 66% | 16% | 0% | 2% | 5% | 12% |
| South-Central Asia | 55% | 13% | 0% | 5% | 11% | 16% |
| Western Hemisphere | 56% | 25% | 1% | 2% | 4% | 10% |
| **Income** | | | | | | |
| $0–$19,999 | 42% | 18% | 2% | 5% | 4% | 30% |
| $20,000–$74,999 | 64% | 19% | 1% | 2% | 4% | 9% |
| $75,000+ | 73% | 12% | 0% | 1% | 7% | 7% |
| **Race** | | | | | | |
| White | 64% | 17% | 1% | 2% | 5% | 11% |
| Black | 70% | 16% | 0% | 1% | 4% | 9% |
| Hispanic | 58% | 16% | 1% | 3% | 6% | 17% |
| Other Race | 65% | 10% | 1% | 4% | 7% | 12% |
| **Education** | | | | | | |
| Less Than Bachelor's | 42% | 23% | 2% | 4% | 5% | 23% |
| Bachelor's Degree | 66% | 13% | 1% | 2% | 7% | 11% |
| More Than Bachelor's | 72% | 15% | 0% | 1% | 4% | 7% |
| **Marital Status** | | | | | | |
| Married | 66% | 18% | 1% | 1% | 8% | 6% |
| Divorced/Widowed | 53% | 37% | 1% | 1% | 3% | 5% |
| Never Married | 64% | 3% | 1% | 4% | 1% | 27% |

**Q40.** As of November 8, 2016, did you own any of the following assets within the United States? *Mark all that apply*. [*N* = 10,965]

| | U.S. Assets | | | | | |
|---|---|---|---|---|---|---|
| | Privately held home or other dwelling | Privately held business | Privately held land | Stocks or bonds | Checking or savings account | Other assets |
| Respondents | 12% | 2% | 3% | 30% | 62% | 8% |
| **Age** | | | | | | |
| Age 18 to 24 | 2% | 0% | 1% | 9% | 45% | 4% |
| Age 25 to 34 | 5% | 2% | 1% | 27% | 70% | 7% |
| Age 35 to 44 | 15% | 3% | 4% | 36% | 68% | 9% |
| Age 45 to 54 | 17% | 3% | 5% | 36% | 61% | 10% |
| Age 55 to 64 | 19% | 3% | 6% | 35% | 62% | 12% |
| Age 65 and up | 13% | 2% | 4% | 30% | 60% | 8% |
| **Sex** | | | | | | |
| Male | 13% | 3% | 5% | 35% | 64% | 10% |
| Female | 11% | 1% | 2% | 26% | 61% | 7% |
| **Region** | | | | | | |
| Africa | 17% | 2% | 4% | 41% | 81% | 10% |
| East Asia and Pacific | 16% | 2% | 5% | 36% | 70% | 11% |
| Europe | 11% | 2% | 3% | 29% | 61% | 7% |
| Near East | 14% | 3% | 3% | 33% | 63% | 9% |
| South-Central Asia | 14% | 3% | 2% | 41% | 73% | 8% |
| Western Hemisphere | 10% | 2% | 3% | 24% | 55% | 9% |
| **Income** | | | | | | |
| $0–$19,999 | 4% | 1% | 1% | 14% | 55% | 6% |
| $20,000–$74,999 | 8% | 2% | 2% | 26% | 65% | 6% |
| $75,000+ | 20% | 3% | 6% | 43% | 69% | 12% |
| **Race** | | | | | | |
| White | 12% | 2% | 3% | 32% | 62% | 9% |
| Black | 18% | 4% | 4% | 21% | 71% | 5% |
| Hispanic | 11% | 2% | 2% | 15% | 59% | 8% |
| Other Race | 16% | 2% | 4% | 33% | 68% | 8% |
| **Education** | | | | | | |
| Less Than Bachelor's | 7% | 1% | 2% | 14% | 47% | 6% |
| Bachelor's Degree | 11% | 2% | 3% | 30% | 64% | 9% |
| More Than Bachelor's | 15% | 3% | 4% | 37% | 68% | 9% |
| **Marital Status** | | | | | | |
| Married | 16% | 3% | 4% | 34% | 66% | 9% |
| Divorced/Widowed | 10% | 2% | 4% | 30% | 59% | 10% |
| Never Married | 5% | 1% | 2% | 22% | 57% | 6% |

# APPENDIX A: SURVEY INSTRUMENT AND COMMUNICATIONS

2016 Overseas Citizen Population Survey (OCPS) OMB Control 0704-0539

Please enter your personal ticket number:

**INTRODUCTION *OMB EXPIRATION DATE: 10/31/2020***

**PLEASE READ THE FOLLOWING INFORMATION CAREFULLY. IT EXPLAINS THE PURPOSE OF THE *2016 OVERSEAS CITIZEN POPULATION SURVEY* AND HOW THE FINDINGS OF THIS SURVEY WILL BE USED.**

This survey is being conducted by the Federal Voting Assistance Program (FVAP), which works to ensure that all Service members, their eligible family members and overseas citizens are aware of their right to vote and have the tools to do so—from anywhere in the world. This survey will provide FVAP with critical data to help improve the services and information available to voters residing outside of the United States. Data from this survey will be used in reports to the president and Congress; the Department of Defense is required to conduct this survey to meet its reporting requirements under the *Uniformed and Overseas Citizens Absentee Voting Act* (*UOCAVA*) as modified by the *Military and Overseas Voter Empowerment Act* (*MOVE*). Some findings from this survey may also be published in professional journals or presented at conferences.

Completing this survey is voluntary. Most people can complete the survey in 10 minutes. This survey does not collect or use personally identifiable information (PII) and is not retrieved by personal identifier. There is no penalty if you choose not to respond. However, we strongly encourage you to participate so that the data will be complete and representative. Your responses will be treated as confidential. Identifying information will not be collected in this survey or delivered to FVAP.

**Additional Information**

Survey Eligibility and Potential Benefits:

A sample of registered voters requesting absentee ballots to be sent to an international address was selected to participate in the survey. There is no direct benefit for your individual participation; however, your responses, when combined with the responses from other overseas citizens, will ***make a difference*** in helping identify absentee voting difficulties that arise and areas where FVAP's products and services can be improved.

Statement of Risk:

The data collection procedures do not involve any substantial risk of disclosure of data.

If you experience any difficulties completing the survey, please contact the Survey Processing Center by sending an email to helpdesk@overseascitizensurvey.com or call 877-374-6217 toll-free. If you have concerns about your rights as a research participant, please contact the OUSD(P&R) Research Regulatory Oversight Office at 703-681-6522/703-681-8320 or e-mail RDHA.R2O2.PR@mail.mil.

Once you start answering the survey, if you desire to withdraw your answers, please notify the Survey Processing Center before [DATE]. Please include in the email or phone message your name and ticket number. Unless withdrawn, partially completed survey data may be used after that date.

**Paperwork Reduction Act Notice**

The public reporting burden for this collection of information is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Washington Headquarters Services, Executive Services Directorate, Directives Division, Office of Information Management, 4800 Mark Center Drive, East Tower, Suite 03F09, Alexandria, VA 22350-3100 (0704-0539). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

PLEASE DO NOT RETURN YOUR RESPONSE TO THE ABOVE ADDRESS.

Thank you for participating in our survey. It is only by hearing from everyone that we can be sure that the results are truly representative. Your participation is voluntary and you may choose not to answer specific questions.

1

## WHERE DO YOU LIVE?

**1.** On November 8, 2016, where was your primary residence?

- ☒ United States/territories
- ☒ Country other than the United States

**2.** What was the last month and year in which your primary residence was in the United States? (Please estimate if you are unsure of the exact month and year.)

_____ month _____ year

**2A.** [Ask if Q2 after 2000, only dates before Q2 migration year] Was your primary residence also outside of the United States during the following dates?

| | Yes | No |
|---|---|---|
| 2A1. November 2000 | ☒ | ☒ |
| 2A2. November 2002 | ☒ | ☒ |
| 2A3. November 2004 | ☒ | ☒ |
| 2A4. November 2006 | ☒ | ☒ |
| 2A5. November 2008 | ☒ | ☒ |
| 2A6. November 2010 | ☒ | ☒ |
| 2A7. November 2012 | ☒ | ☒ |
| 2A8. November 2014 | ☒ | ☒ |

**3.** Please specify your country of residence on November 8, 2016.

Drop down menu listing frame countries. (State Department Names?)

**4.** In which month and year did you *last* move to this country? (Please estimate if you are unsure of the exact month and year.)

_____ month _____ year

**4A.** [Ask if Q4 after 2000, only dates before Q4 migration year] Was your primary residence also in this country during the following dates?

| | Yes | No |
|---|---|---|
| 4A1. November 2000 | ☒ | ☒ |
| 4A2. November 2002 | ☒ | ☒ |
| 4A3. November 2004 | ☒ | ☒ |
| 4A4. November 2006 | ☒ | ☒ |
| 4A5. November 2008 | ☒ | ☒ |
| 4A6. November 2010 | ☒ | ☒ |
| 4A7. November 2012 | ☒ | ☒ |
| 4A8. November 2014 | ☒ | ☒ |

**5.** In which month and year did you *last* move to your current address? (Please estimate if you are unsure of the exact month and year.)

_____ month _____ year

**5A.** [Ask if Q5 after 2000, only dates before Q5 migration year] Was your primary residence also at this address during the following dates?

| | Yes | No |
|---|---|---|
| 5A1. November 2000 | ☒ | ☒ |
| 5A2. November 2002 | ☒ | ☒ |
| 5A3. November 2004 | ☒ | ☒ |
| 5A4. November 2006 | ☒ | ☒ |
| 5A5. November 2008 | ☒ | ☒ |
| 5A6. November 2010 | ☒ | ☒ |
| 5A7. November 2012 | ☒ | ☒ |
| 5A8. November 2014 | ☒ | ☒ |

**6.** In the 12 months before November 8, 2016, how many times had you traveled to the United States?

_____

**7.** What was the *primary reason* that you were living outside of the United States on November 8, 2016? Was it because you, a partner, and/or a family member…

- ☒ … were born outside the United States.
- ☒ … moved with parents.
- ☒ … could be close to extended family.
- ☒ … could retire.
- ☒ … could go to school.
- ☒ … could obtain a job with a new employer.
- ☒ … were transferred by an employer.
- ☒ … were a citizen of the destination country.
- ☒ … were serving in the military.
- ☒ … were there for religious/missionary reasons.
- ☒ … were there for nonreligious volunteer work.
- ☒ Other

**7A.** [Ask if Q7 = Other] Please specify the primary reason you were living outside of the United States on November 8, 2016.

**YOUR 2016 VOTING EXPERIENCE**

A lot of people were not able to vote because they weren't registered, they were sick, they didn't have time or something else happened to prevent them from voting. And sometimes, people who *usually* vote or who *planned* to vote forget that something *unusual* happened on this year's Election Day that prevented them from voting *this* time. So please think carefully for a minute about the election held on November 8, 2016.

**8.** Did you vote in the November 8, 2016, General Election?

- ☒ Yes, definitely voted
- ☒ No, definitely did not vote
- ☒ Not sure if I voted

**8_TR.** In the election held on November 8, 2016, did you definitely vote in person on election day; definitely complete an absentee ballot by mail, e-mail, fax, or online on or before November 8, 2016; definitely not vote; or are you not completely sure whether you voted in that election?

- ☒ Definitely voted in person
- ☒ Definitely voted by mail
- ☒ Definitely voted by e-mail
- ☒ Definitely voted at an online website
- ☒ Definitely voted by fax
- ☒ Definitely did not vote
- ☒ Not sure

**9.** Did you request an absentee ballot for the November 8, 2016, General Election?

- ☒ Yes
- ☒ No
- ☒ Not sure

**9_TR.** Did you request an absentee ballot for the November 8, 2016, General Election?

- ☒ Yes
- ☒ No, but I automatically received an absentee ballot from a local election official.
- ☒ No, I never received an absentee ballot, but I expected to receive one.
- ☒ No, I did not need an absentee ballot.

**9A.** Did you expect to receive an absentee ballot automatically from an election official for the November 8, 2016, General Election?

- ☒ Yes
- ☒ No
- ☒ Not sure

**9B.** [Ask if Q9 = Yes] How did you request an absentee ballot for the November 8, 2016, General Election?

- ☒ Mail
- ☒ Email
- ☒ Website
- ☒ Fax
- ☒ I'm unsure how I submitted an absentee ballot request.

**9C.** [Ask if Q9 = Yes] Was this the first time you requested an absentee ballot while living in [pipe in Q3 response]?

- ☒ Yes
- ☒ No

**10.** Did you receive an absentee ballot from an election official for the November 8, 2016, General Election?

- ☒ Yes
- ☒ Not sure
- ☒ No

**10A.** Did you obtain a Federal Write-In Absentee Ballot (FWAB) for the November 8, 2016, General Election?

- ☒ Yes
- ☒ Not sure
- ☒ No

**10B.** [Ask if Q10 or Q10A = Yes] How did you receive your absentee ballot or obtain a Federal Write-In Absentee Ballot (FWAB) for the November 8, 2016, General Election?

- ☒ Mail
- ☒ Email
- ☒ Website
- ☒ Fax
- ☒ I'm unsure how I received an absentee ballot.

**10B_TR.** [Ask if Q10 or Q10A = Yes] How did you receive your absentee ballot or obtain a Federal Write-In Absentee Ballot (FWAB) for the November 8, 2016, General Election?

- ☒ Mail
- ☒ Fax
- ☒ E-mail
- ☒ In person
- ☒ Downloaded ballot from State link on FVAP.gov
- ☒ Downloaded ballot from State voting website
- ☒ Downloaded ballot from State link at another website
- ☒ Other
- ☒ Do not recall

**11.** [Ask if Q10 or Q10A= Yes] Did you return your absentee ballot for the November 8, 2016, General Election?

- ☒ Yes
- ☒ Not sure
- ☒ No

**11A.** [Ask if Q11 = Yes] How did you return your absentee ballot or Federal Write-In Absentee Ballot (FWAB) for the November 8, 2016, General Election?

- ☒ Mail
- ☒ Email
- ☒ Website
- ☒ Fax
- ☒ I'm unsure how I submitted an absentee ballot.

**11A_TR.** [Ask if Q11 = Yes] How did you return your absentee ballot or Federal Write-In Absentee Ballot (FWAB) for the November 8, 2016, General Election?

- ☒ Regular mail
- ☒ USPS Express/Certified mail
- ☒ FedEx, UPS, DHL, or other commercial delivery carrier
- ☒ FVAP Electronic Transmission System (ETS), including ETS fax and ETS email
- ☒ Fax, excluding Electronic Transmission System (ETS)
- ☒ E-mail (e.g., as an attachment)
- ☒ Online (e.g., through a secure website)
- ☒ Installation Voter Assistance (IVA) Office
- ☒ Other

**11B.** [Ask if Q11A = "Mail"; NO TREATMENT EQUIVALENT] What type of mail service did you use to submit your absentee ballot?

- ☒ National mail service owned or operated by the government of [Pipe in Q3 Country]
- ☒ FedEx, UPS, DHL or other private delivery carrier
- ☒ Mail service provided by the U.S. government in [Pipe in Q3 Country] (e.g., U.S. consulate, military base)
- ☒ Other

**11C.** [Ask if Q11 = "No" or "Unsure"; NO TREATMENT EQUIVALENT] For the election held on November 8, 2016, did you complete and submit a ballot at a polling station in the United States on Election Day?

- ☒ Definitely voted in person
- ☒ Not sure
- ☒ Definitely did not vote in person

**12.** [Ask if Q11 and Q11C = "Not Sure" or "Definitely did not vote in person"] What was the *main reason* you did not vote in the November 8, 2016, General Election?

- ☒ I tried/wanted to vote but did not or could not complete the process.
- ☒ I did not want to vote.

**12A.** [Ask if Q12 = "I tried/wanted to vote but did not or could not complete the process."] Which of the following best describes why you did not vote in the election?

- ☒ I was not registered to vote.
- ☒ I did not know how to get an absentee ballot.
- ☒ My absentee ballot arrived too late.
- ☒ My absentee ballot did not arrive at all.
- ☒ The absentee voting process was too complicated.
- ☒ Some other reason

**12B.** [Ask if Q12A = Other] Please specify the primary reason why you did not vote in the November 8, 2016, General Election.

**13.** [Ask if Q11 and Q11C = "Not Sure" or "Definitely did not vote in person"] If you had voted, how confident are you that your vote in the November 8, 2016 General Election would have been counted as you intended?

- ☒ Very confident
- ☒ Somewhat confident
- ☒ Not too confident
- ☒ Not at all confident

**13A.** [Ask if Q13 = "Not too confident" or "Not at all Confident"] Why do you not feel confident that your vote would have been counted as you intended?

**14.** [Ask if Q11 or Q11C = Yes] How confident are you that your vote in the November 2016 General Election was counted as you intended?

- ☒ Very confident
- ☒ Somewhat confident
- ☒ Not too confident
- ☒ Not at all confident

**14A.** [Ask if Q14 = "Not too confident" or "Not at all Confident"] Why do you not feel confident that your vote was counted as you intended?

**15.** Did you experience any of the following when you attempted to vote absentee in the November 8, 2016, General Election? *Mark "Yes" or "No" for each item.*

| | Yes | No |
|---|---|---|
| I did not know how to obtain an absentee ballot. | ☒ | ☒ |
| I had difficulty registering to vote. | ☒ | ☒ |
| I had difficulty requesting a ballot or completing a Federal Post Card Application (FPCA). | ☒ | ☒ |
| My ballot did not arrive on time. | ☒ | ☒ |
| My ballot did not arrive at all. | ☒ | ☒ |
| I expected to receive a ballot automatically but did not. | ☒ | ☒ |
| I was informed that there was a problem with my signature. | ☒ | ☒ |

**VOTING RESOURCES**

The Federal Voting Assistance Program (FVAP) provides the following services to help overseas citizens successfully complete the absentee-voting process.

**FVAP.gov:**

FVAP.gov provides customized, voting-related information and resources for all citizens covered by the *Uniformed and Overseas Citizens Absentee Voting Act* (*UOCAVA*).

The website also provides State-specific election information, including dates, deadlines and contact information that voters can rely on to adhere to their State's absentee-voting process. Other products and services, such as fact sheets and FAQs, are also available at FVAP.gov.

**FVAP staff support:**

FVAP provides support through email at vote@fvap.gov and a toll-free telephone service, which allows American citizens living overseas who are eligible to vote to ask FVAP staff for voting information or assistance.

**FVAP Online Assistant:**

FVAP offers an easy-to-use online assistant at FVAP.gov to guide voters in completing Federal Post Card Applications (FPCA) and Federal Write-In Absentee Ballots (FWABs).

The online assistant tool simplifies the completion of FPCAs and FWABs by providing State-specific information and instructions on how to download, print and return forms to election offices.

**16.** Before taking this survey, were you aware of the Federal Voting Assistance Program (FVAP) or its services?

- ☒ Yes
- ☒ No

**17.** [FVAP.gov, FVAP staff support, and FVAP online assistant tool only appear if Q16 = yes] In preparation for the 2016 primaries or general election, did you use any of the following resources? *Mark "Yes" or "No" for each item.*

| | Yes | No |
|---|---|---|
| FVAP.gov | ☒ | ☒ |
| FVAP staff support | ☒ | ☒ |
| FVAP online assistant tool | ☒ | ☒ |
| State or local election office website | ☒ | ☒ |
| Voting assistance resources provided by U.S. government facilities in [pipe in 2016 country of residence Q3] (e.g., U.S. consulate, military base) | ☒ | ☒ |

**18.** **[Ask if Q17 "FVAP.gov" or "FVAP online assistant tool" = yes]** Overall, how satisfied were you with the FVAP website when you visited it in anticipation of the November 8, 2016 General Election?

- ☒ Very satisfied
- ☒ Satisfied
- ☒ Neither satisfied nor dissatisfied
- ☒ Dissatisfied
- ☒ Very dissatisfied

**19.** **[FVAP.gov, FVAP staff support, and FVAP online assistant tool only appear if Q16 = yes]** Please indicate which, if any, FVAP products or services you have used for voting assistance during any election *before* the 2016 General Election. *Mark "Yes" or "No" for each item.*

| | Yes | No |
|---|---|---|
| FVAP.gov | ☒ | ☒ |
| FVAP staff support | ☒ | ☒ |
| FVAP online assistant tool | ☒ | ☒ |
| State or local election office website | ☒ | ☒ |
| Voting assistance resources provided by U.S. government facilities in [pipe in 2016 country of residence Q3] (e.g., U.S. consulate, military base) | ☒ | ☒ |

**20.** **[Ask if Q17 "State or local election office website" = yes. FVAP.gov only appears if Q16 = yes]** What source led you to visit your State or local election office website when you visited in anticipation of the November 8, 2016 General Election?

- ☒ FVAP.gov
- ☒ Internet search
- ☒ State or local election official
- ☒ Family or friend
- ☒ State Department or Consular Services
- ☒ Other

*The Federal Post Card Application (FPCA)* is a single form that you can use to register to vote and/or request an absentee ballot for federal elections.

Some States require eligible voters who vote absentee to use the FPCA to request an absentee ballot.

**21.** Before taking this survey, were you aware that you could use the Federal Post Card Application (FPCA) to register to vote and request an absentee ballot?

- ☒ Yes
- ☒ No

**21A.** **[Ask if Q21 = "Yes" & Q9 = "Yes"]** Did you use the Federal Post Card Application (FPCA) to request your absentee ballot or did you use another method?

- ☒ Yes, I used an FPCA to request an absentee ballot.
- ☒ No, I used a State or local form to request an absentee ballot.
- ☒ No, I used a non-government website (e.g., Rock the Vote [RTV], Overseas Vote Foundation [OVF]) to request an absentee ballot.
- ☒ No, I used another method.

[Display if Q10A ! = "Yes"] *The Federal Write-In Absentee Ballot (FWAB; Standard Form 186)* is a backup way to vote in case your requested absentee ballot does not arrive in time to vote and return your ballot. It lets you write in the names of the candidate you wish to vote for.

Please answer with the most appropriate response regarding the *November 8, 2016, General Election.*

**22.** [Ask if Q10A !="Yes"] Before taking this survey, were you aware of the Federal Write-In Absentee Ballot (FWAB)?

- ☒ Yes
- ☒ No

**23.** Did you receive information about the absentee-voting process from any of the following sources in 2016? *Mark "Yes" or "No" for each item.*

| | Yes | No |
|---|---|---|
| State or local election official | ☒ | ☒ |
| U.S. newspapers, magazines, radio or TV | ☒ | ☒ |
| International newspapers, magazines, radio or TV | ☒ | ☒ |
| Family or friends living outside of [pipe in Q3 response option] | ☒ | ☒ |
| Family or friends living in [pipe in Q3 response option] | ☒ | ☒ |
| Internet other than social media | ☒ | ☒ |
| Social media (e.g., Facebook, Twitter, blogs) | ☒ | ☒ |
| Directly from candidates/parties | ☒ | ☒ |
| Employer/Human Resources department | ☒ | ☒ |
| An organization for Americans living abroad | ☒ | ☒ |
| Other | ☒ | ☒ |

**24.** Did you access the Internet on a cell phone, tablet or other mobile handheld device at least occasionally in October 2016?

- ☒ Yes
- ☒ No
- ☒ Not Sure/Don't Know

**25.** How would you characterize the reliability of postal service in [pipe in Q3 response] relative to the United States Postal Service?

- ☒ Much less reliable
- ☒ Somewhat less reliable
- ☒ About the same level of reliability
- ☒ Somewhat more reliable
- ☒ Much more reliable

## ENGAGEMENT

**26.** How interested or uninterested were you in the election held on November 8, 2016?

- ☒ Very interested
- ☒ Somewhat interested
- ☒ Neither interested nor uninterested
- ☒ Somewhat uninterested
- ☒ Very uninterested

**27.** How much attention did you pay to news about U.S. politics and the November 8, 2016 General Election in October 2016?

- ☒ A great deal
- ☒ A lot
- ☒ A moderate amount
- ☒ A little
- ☒ None at all

**28.** Do you ever use social networking sites like Facebook or Twitter to do any of the following? *Mark "Yes" or "No" for each item.*

| | Yes | No |
|---|---|---|
| Post links to political stories or articles for others to read | ☒ | ☒ |
| Post your own thoughts or comments on political or social issues | ☒ | ☒ |
| Encourage other people to take action on a political or social issue that is important to you | ☒ | ☒ |
| Encourage other people to vote | ☒ | ☒ |
| Repost content, related to political or social issues, that was originally posted by someone else | ☒ | ☒ |
| "Like" or promote material related to political or social issues that others have posted | ☒ | ☒ |

## SOCIAL CONNECTIONS

**29.** How many U.S. citizens aged 18 and older would you estimate you know who resided in [pipe in Q3 response] on November 8, 2016?

**29A.** [Ask if Q29 > 0] How many of the U.S. citizens in [pipe in Q3 response] that you know would you estimate you talked to about absentee-voting procedures?

**29B.** [Ask if Q29 > 0] Of the U.S. citizen, aged 18 and older who you knew in [pipe in Q3 response] on November 8, 2016, how many of them would you estimate requested an absentee ballot or had an absentee ballot sent to them for the election held on November 8, 2016?

**29C.** [Ask if Q29 > 0]
How many U.S. citizens aged 18 and older resided at your primary address in [pipe in Q3 response] on November 8, 2016?

## MORE ABOUT YOU

**30.** Are you Spanish/Hispanic/Latino?

- ☒ No, not Spanish/Hispanic/Latino
- ☒ Yes, Mexican, Mexican, American, Chicano, Puerto Rican, Cuban, or other Spanish/Hispanic/Latino

**31.** What is your race? *Mark all that apply.*

- ☒ White
- ☒ Black or African American
- ☒ American Indian or Alaska Native
- ☒ Asian (e.g., Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese)
- ☒ Native Hawaiian or other Pacific Islander (e.g., Samoan, Guamanian, or Chamorro)

**32.** What is the highest degree or level of school that you have completed?

- ☒ 12 years or less of school
- ☒ High school graduate—traditional diploma
- ☒ High school graduate—alternative diploma (home school, GED, etc.)
- ☒ Some college credit but less than one year
- ☒ One or more years of college, no degree
- ☒ Associate degree (e.g., AA, AS)
- ☒ Bachelor's degree (e.g., BA, AB, BS)
- ☒ Master's, doctoral or professional school degree (e.g., MA, PhD, JD)

**33.** As of November 8, 2016, in which country or countries did you hold citizenship? *Mark all that apply.*

- ☒ United States
- ☒ [pipe in Q3 response]
- ☒ Other

**33A.** [Ask if Q33 = Other] Please specify the country or countries where you hold citizenship other than the United States or [pipe in Q3 response option].

**34.** What is your marital status?

- ☒ Married
- ☒ Separated
- ☒ Divorced
- ☒ Widowed
- ☒ Never married

**35.** [Ask if 34 = Married] As of November 8, 2016, in which country or countries did your spouse hold citizenship? *Mark all that apply.*

- ☒ United States
- ☒ [pipe in Q3 response]
- ☒ Other

**35A.** [Ask if Q35 = Other] Please specify the country or countries where your spouse holds citizenship other than the United States or [pipe in Q3 response option].

**36.** Do you have children?

- ☒ Yes
- ☒ No

**37.** [Ask if Q36 = Yes] As of November 8, 2016, in which country or countries did your children hold citizenship? *Mark all that apply.*

- ☒ United States
- ☒ [pipe in Q3 response]
- ☒ Other

**37A.** [Ask if 37 = other] Please specify the country or countries where your children hold citizenship other than the United States or [pipe in Q3 response option].

**38.** Which category represents your household's total combined income during the 12 months leading up to November 8, 2016?

- ☒ Under $1,000
- ☒ $1,000–$4,999
- ☒ $5,000–$9,999
- ☒ $10,000–$19,999
- ☒ $20,000–$39,999
- ☒ $40,000–$49,999
- ☒ $50,000–$74,999
- ☒ $75,000–$99,999
- ☒ $100,000–$149,999
- ☒ $150,000+

**39.** In the week before November 8, 2016, did you work either full-time or part-time for pay?

- ☒ Yes
- ☒ No, I was retired.
- ☒ No, I was disabled.
- ☒ No, I was unable to work.
- ☒ No, I was a caretaker or stay at home parent.
- ☒ No, other

**40.** As of November 8, 2016, did you own any of the following assets within the United States? *Mark all that apply.*

- ☒ Privately held home or other dwelling
- ☒ Privately held business
- ☒ Privately held land
- ☒ Stocks or bonds
- ☒ Checking or savings account
- ☒ Other assets

**41.** Thank you for participating in the survey. If you have comments or concerns that you were not able to express in answering this survey, please enter them in the space provided below. *Please do not include any Personally Identifying Information (PII).*

## Invitation

FVAP.GOV
Federal Voting Assistance Program

codeM1
first_name last_name
company
dept
contact
Addrssln1
Addrssln2
Addrssln3
Addrssln4
Address5
Csll
COUNTRY

June 5, 2015

Dear first_name last_name,

We are currently trying to learn more about Americans living outside the United States so that we can help ensure that all Americans abroad know of their right to vote and are able to successfully cast their ballots. You were randomly selected because State voting records show that you were living at a foreign address during the November 2016 election, and that qualifies you to give us the type of feedback that is vital to our success. As the Director of the Federal Voting Assistance Program (FVAP), **I personally invite you to participate in a brief, 10-minute survey regarding your experience with the 2016 election, whether you voted or not.**

We invite you to complete the 2016 Overseas Citizen Population Survey online at:

**http://www.OverseasCitizenSurvey.com**

So that we do not re-contact you, enter your personal **Ticket Number: code.**

The act of voting is one of the most fundamental rights associated with democracy, and many citizens consider it to be an important experience. You may be aware that Americans who live and work abroad have the right to vote in American elections, but difficulties exercising this right do occur—in fact, you might have directly experienced difficulty in trying to cast an absentee ballot from outside of the United States. The U.S. government specifically established FVAP to ensure that all citizens living abroad are aware of their right to vote and have the tools to do so from anywhere in the world. We need your participation in this survey to help us make sure we are doing all we can to fulfill that mission. The information gathered in this survey will help us as we work to improve the absentee voting process for all U.S. citizens living abroad.

The survey is voluntary. It does not collect any information regarding your political party affiliation or other political choices, and your responses to the survey will be kept confidential and will not be associated with your name.

If you have any questions or need assistance, please send an email to helpdesk@overseascitizensurvey.com or call our Survey Help Desk at 877-374-6217. If you have any questions or suggestions about the survey, please visit our website at www.FVAP.gov/info/contact.

Thank you for your help as we work to ensure that all Americans abroad know of their right to vote and have all the information and tools necessary to exercise that right.

Sincerely,

David Beirne
Director, FVAP

## First Letter

FVAP.GOV
Federal Voting Assistance Program

codeM2
first_name last_name
company
dept
contact
Addrssln1
Addrssln2
Addrssln3
Addrssln4
Address5
Csll
COUNTRY

June 17, 2015

Dear first_name last_name,

About a week ago, you should have received a letter inviting you to participate in an important survey sponsored by the Federal Voting Assistance Program (FVAP). FVAP is the federal office dedicated to ensuring that American citizens living outside the United States are aware of their right to vote and have the tools to do so. We asked for your feedback in order to learn more about the experiences of Americans living outside the United States so we can improve the services that we provide them. Our hope is that all citizens living abroad, like you, have the opportunity to cast their vote no matter where they are located around the world. Your participation in this survey will provide us with critical information to make this possible.

If you have already completed the online survey, we thank you for sharing your experiences. If you have not yet had the opportunity to complete the survey, we encourage you to do so today.

To complete the brief, 10-minute 2016 Overseas Citizen Population Survey, go to:

**http://www.OverseasCitizenSurvey.com**

So that we do not re-contact you, enter your personal **Ticket Number: code.**

Although the survey is voluntary, we want to hear from everyone selected—voters and non-voters alike. Our goal is to receive replies from as many different citizens as possible and to use those replies to better understand the needs of U.S. citizens residing in other nations. The survey does not collect any information regarding your political party affiliation or other political choices. Your responses to the survey will be kept confidential and will not be associated with your name.

Our Survey Help Desk is available to assist you with completing the survey or to answer any questions you may have. You may contact us by email at helpdesk@overseascitizensurvey.com or by calling 877-374-6217.

If you have any additional questions or suggestions about the survey, please visit our website at www.FVAP.gov/info/contact.

Thank you for your help as we work to ensure that all Americans abroad know of their right to vote and have the information and tools to exercise that right from anywhere in the world.

Sincerely,

David Beirne
Director, FVAP

## Second Letter

FVAP.GOV
Federal Voting Assistance Program

codeM3
first_name last_name
company
dept
contact
Addrssln1
Addrssln2
Addrssln3
Addrssln4
Address5
Csll
COUNTRY

June 25, 2015

Dear first_name last_name,

Voters and non-voters; the Federal Voting Assistance Program (FVAP) — the U.S. government agency charged with facilitating the voting process for citizens living abroad — needs your participation in its 2016 Overseas Citizen Population Survey. Your views and opinions are important to us, and you are in a unique position to provide relevant insights on your experience living outside the United States, whether you voted or not. I urge you to take this opportunity to complete the survey. The information and opinions you provide are critical to identifying and addressing problems that American citizens living outside the United States face as they exercise their right to vote. It is extremely important that U.S. citizens have the opportunity for full participation in our democracy, and your answers to this brief survey will help us provide that opportunity for all Americans, wherever they may live around the world.

We understand that international mail can take some time, so you may have already completed the survey by the time you receive this notice. If this is the case, thank you for your time and effort. If you have not yet completed the survey, we invite you to do so as soon as possible. As of this mailing, we are accepting online copies of the survey. These additional responses will be combined with those we have already received and will also help us provide better voting services and assistance. The survey will only take 10 minutes, and does not collect any information regarding your political party affiliation or other political choices. Your responses to the survey will be kept confidential and will not be associated with your name.

To complete the survey, please visit 2016 Overseas Citizen Population Survey website at **http://www.OverseasCitizenSurvey.com** and enter your personal **Ticket Number: code**

If you have any questions or need assistance, please send an email to helpdesk@overseascitizensurvey.com or call our Survey Help Desk at 877-374-6217. If you have any suggestions about the survey, please visit our website at www.FVAP.gov/info/contact.

Thank you for your help as we work to ensure that all Americans abroad know of their right to vote and have the information and tools to successfully exercise that right.

Sincerely,

David Beirne
Director, FVAP

First Postcard






Second Postcard

FVAP.GOV
Federal Voting Assistance Program

INTL PRIORITY AIRMAIL
U.S. Postage Paid
Los Angeles,CA
Permit No. 66

**Return Service Requested**

Recently, you should have received an invitation to complete a survey about your experience as an American citizen living abroad. We understand that international mail can take some time, so you may have already completed the survey by the time you receive this notice. If this is the case, thank you for your time and effort. The information you provided will help us improve and support the absentee voting process for all citizens living outside of the United States.

If you have not yet completed the survey, please take a few moments to do so now by going to this website:

**http://www.OverseasCitizenSurvey.com**

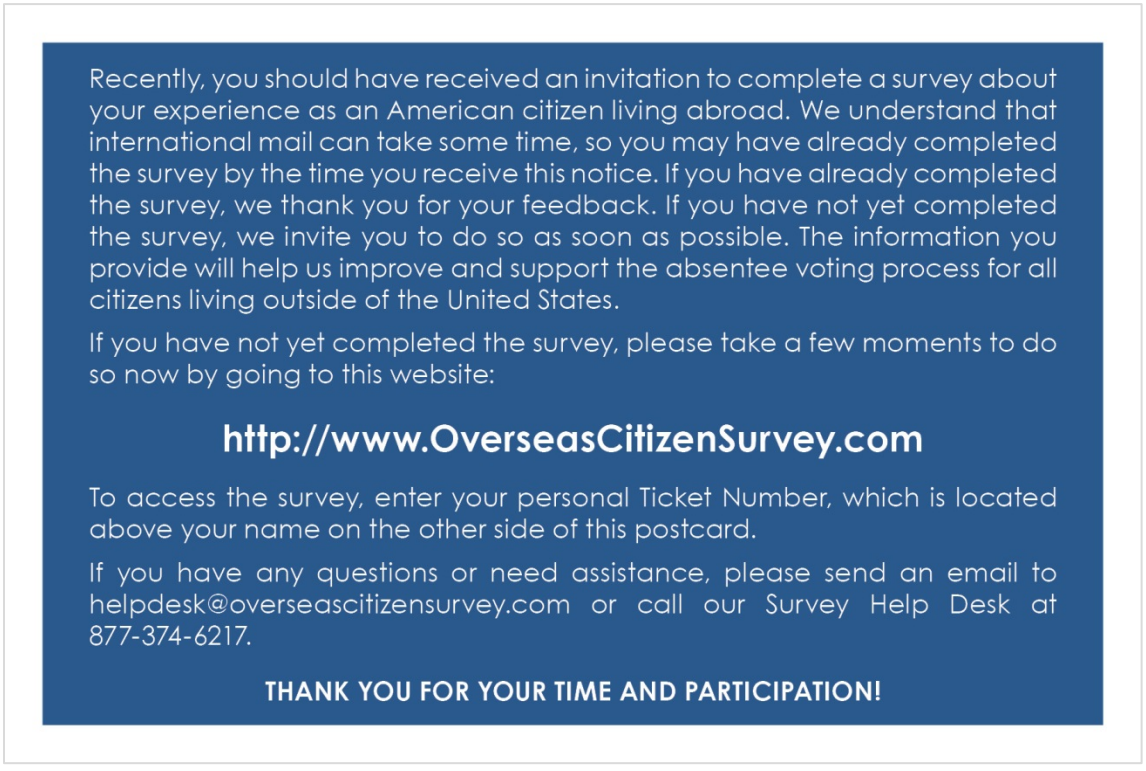
To access the survey, enter your personal Ticket Number, which is located above your name on the other side of this postcard.

If you have any questions or need assistance, please send an email to helpdesk@overseascitizensurvey.com or call our Survey Help Desk at 877-374-6217.

**THANK YOU FOR YOUR TIME AND PARTICIPATION!**

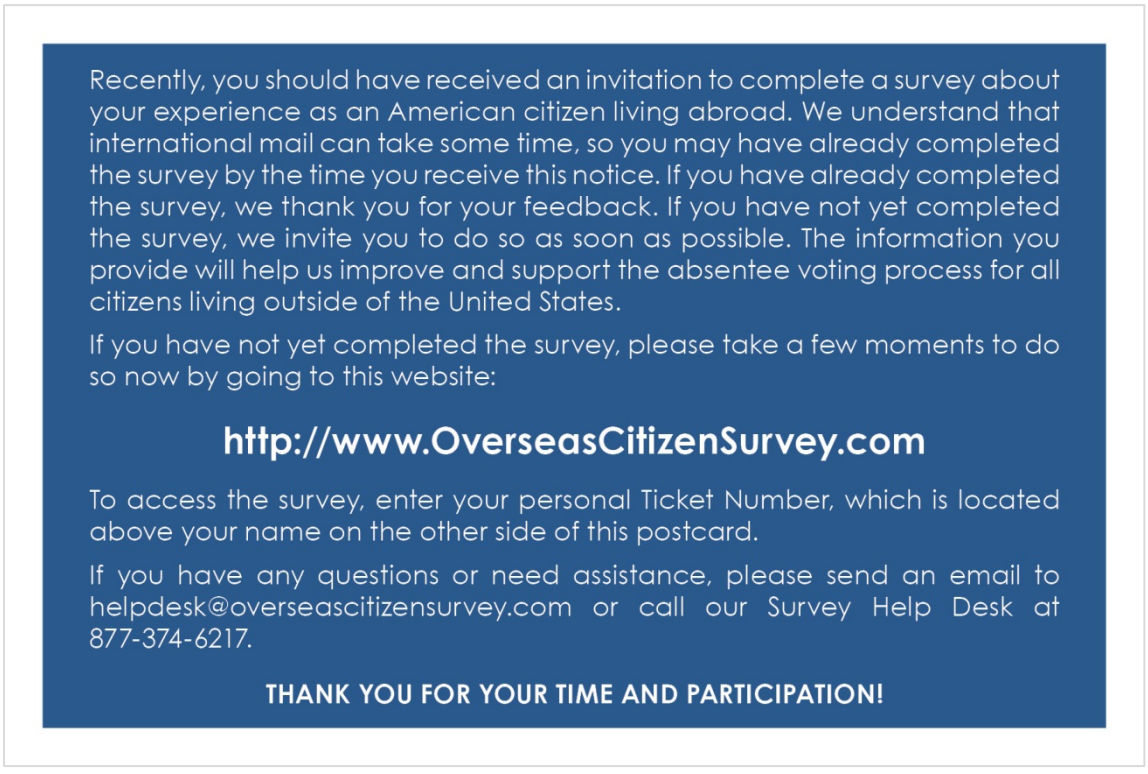
Third Postcard



Fourth Postcard



Domestic Postcard

